



# FORTY-FIRST ANNUAL REPORT

OF THE

# DEPARTMENT OF MARINE AND FISHERIES

1907-8

# FISHERIES

PRINTED BY ORDER OF PARLIAMENT



OTTAWA
PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY
1908-9

Digitized by the Internet Archive in 2022 with funding from University of Toronto

To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, a Baronet, G.C.M.G., &c., &c., Governor General of Canada,

### MAY IT PLEASE YOUR EXCELLENCY:

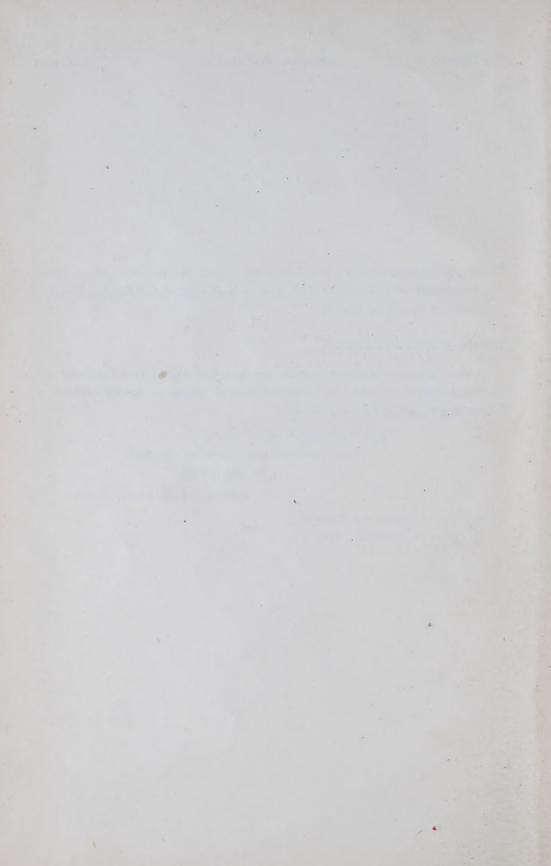
I have the honour to submit herewith, for the information of Your Excellency and the legislature of Canada, the Forty-first Annual Report of the Department of Marine and Fisheries, Fisheries Branch.

I have the honour to be,
Your Excellency's most obedient servant,

L. P. BRODEUR,

Minister of Marine and Fisheries.

DEPARTMENT OF MARINE AND FISHERIES, OTTAWA, November, 1908.



# ALPHABETICAL INDEX

TO THE

# FISHERIES REPORT

## 1907-8

A

	PAGE.
Alberta, report of Inspector	211
Antigonish County, N.S., returns	
Areas—extent of water—or coast	
Armstrong, Wm., Hatchery officer, Newcastle, Ont	
В	
Baldwin's Mills, rearing ponds	275
Babine Hatchery, B.C	269
Black Bass, breeding ponds	
Bedford Hatchery, N.S	
Belknap, W. G	0.00
Behring Sea Question, Sealing Fleet of 1907	238
Belliveau, A. H., Inspector's report	151
Bernier, J. E., Capt., report	236
Bertram, A. C., Inspector of Cape Breton Island, report	80
Biological Marine Stations	. xvii.
Lake Stations, Georgian Bay	
Bon Accord Hatchery, B.C	262
Bonaventure County, P.Q	147, 152
Bounties Fishing Regulations	1
Statement of claims received and paid, 1907	8
General remarks	6
Statement of claims received and paid since 1882	7
Statement of all vessels receiving bounties, 1907	.12 to 29
British Columbia, Fisheries Commission	xv.
Report on fisheries by Inspector C. B. Sword	215
Report by Inspector J. T. Williams	215
Reports by Inspector E. G. Taylor	220
Reports on fish culture	252
Seal catch in 1907	233
List of salmon canneries and pack for 1907	224, 225
Statements of catch and fishing material	233
Bucknall, Robt. C., hatchery officer B.C	268

Page
Calder, J. F., Inspector, N.B
Carmichael, Alex. G., report on hatchery (C.B.)
Cape Breton island. (See Nova Scotia District No. 1), also County 80, 82
Capital invested in the fisheries of Canada xxlx.
Catellier, L. N., report on fish culture
Chapman, R. A., Inspector, N.B., report
Charlotte County, N.B., reports of overseers, &c
Coast—extent of Canadian Coast line xxi.
Cod, remarks on
Colchester County, N.S., statistics of fisheries 100
Commissions, Dominion Fisheries xlv.
Cruisers, Canadian list of
Culture of fish. (See 'F').
Cunningham, F. H., Supt. of Hatcheries, report
Cumberland County, N.S., fishery returns
D
D.
Deseve, A. L., Hatchery officer at Magog
Digby County, returns
E
Expenditure of Fishery Services
Subdivision by provinces
Fish culture 33
Fisheries Protection Service
Comparative Statement
Export of fish from Canada xxiv
$\mathbf{F}$
T .
Fish culture xxxiii
Report on, for 1907, by Prof. Prince, Dominion Commissioner 241
Report on, F. H. Cunningham, Supt
Lobster ponds and hatcheries
Reports of officers in charge of hatcheries
Hatcheries in Nova Scotia
Hatcheries in New Brunswick
Hatcheries in Quebec
Hatcheries in Ontario
Hatcheries in Prince Edward Island
Hatcheries in British Columbia 255
Expenditure
Fishery officers steff
Fishery officers, staff
Statistical statements. (See letter 'S.')
Thus Statuthanting of
Recapitulation since 1873
<u> </u>
Fundy Bay fisheries 42, 5

123

SESSIONAL PAPER No. 22	
G	-
,	Page.
Gaspé, Hatchery	278
County, P.Q.,	154 xlv.
Georgian Bay Biological Station	XX.
Georgian Bay Biological Station	274
Gloucester County, N.B., returns	56, 58
Gourdeau, F., LtCol., Deputy Minister, report	xiii.
Grand Manan fisheries	42, 45
Granite Creek Hatchery	265
Guysborough County, N.S	06, 108
Gibbs, Henry Hatchery officer, B.C	270
H	
Halkett, Andrew, Curator of the Ottawa Museum, report	306
Halibut, remarks on	
Halifax County, N.S., reports	
Harrison, H. E., Fishery Inspector, report	
Harrison Lake Hatchery, B.C	261
Herring, remarks on	42, 145
History and movements of the Cod family, by Prof. Prince	xl.
Hockin, R., Inspector's report	83
Holroyd, A. W., Hatchery officer, P.E.I	285
I	
Inspectors of Fisheries, No. (See Staff)	311
Reports from. (See each Province)	911
Inverness County, N.S., returns	94
Invertions Council, 14th, 10th and 11th	Ŋ±
K	
Kelly's Pond Hatchery, P.E.I	285
Kent County, N.B., returns	62, 64
L	
·	
Lake Superior.	190
Huron.	192
Erie	194
Ontario	196
of the Woods St. Jean, Que	190
Lakes in Alberta	151
Lindsay, Robt., Hatchery officer, Gaspé	211 278
Lobster Hatcheries, N.S. and N.B	
Lobster ponds	98, 299 259
Lunenburg, fishing fleet	

county, returns.....

### 8-9 EDWARD VII., A. 1909

M

	Page.
Magog Hatchery, Que	274
Marine Biological Stations, report	xvii.
Magdalen Islands	158
Manitoba Lake	204
Manitoba, report and statistics of Fisheries by Inspt. W. S. Young	202
Margaree Hatchery, C.B	284
Matheson, J. A., Insp., P.E.I., report	68
Migrations of fish, by Prof. Prince	xlvii.
Miller, E. W., Inspector, N.W.T., reports	206
Miramichi Hatchery, N.B., report	281
Missisquoi Bay fishing	151
Mitchell, D. S., Hatchery officer, B.C.	266
Mowat, Alex., Hatchery officer at Restigouche, N.B	279
McCluskey, Chas., Hatchery officer, report	280
Mont-Tremblant Hatchery, Que	275
Museum, Fisheries, report on its exhibits by curator Halkett	
	306
McNab, A. J., officer in charge	274
N	
New Brunswick, Report on District No. 1, by Insp. J. F. Calder	42
Report on District No. 2, by Insp. R. A. Chapman	46
Report on District No. 3, by Insp. H. E. Harrison	48
	45, 50
Statistics of Fisheries Districts 1, 2 and 3	
Recapitulation of Yield and Value of Fish	66
Recapitulation of Fishing Materials	67
List of Vessels receiving bounties	23
Newcastle, Ont., Hatchery, report	273
Nimpkish Hatchery, B.C	269
N.W. Territories, Statistics of Fisheries. (See Alberta and Saskatchewan.)	
North Shore Division, P.Q., reports	147
Northumberland County, N.B., returns	56, 58
Nova Scotia, Report District No. 1, A. C. Bertram	80
Report District No. 2, R. Hockin	83
Report District No. 3, A. C. Robertson	86
Statistics of Fisheries Districts Nos. 1, 2, 3	to 141
Recapitulations, Yield and Material	<b>12</b> , <b>14</b> 3
List of Vessels receiving bounties	to 22
0	
·	
Ontario, remarks on fisheries	182
Statistics of fisheries	190
Statement of fishing materials	200
Ogden, Alfred, Hatchery officer, N.S	283
Ottawa Hatchery, officer's report	272
P	
Parker, Wm., Hatchery officer, Sandwich, Ont	272
Pemberton Hatchery, B.C	64, 256

ix

### SESSIONAL PAPER No. 22

Ponds for breeding fish	Page. 256 68 70 to 79 241 xvii. xli. xlvii.
Pretty, A. W., B.C	270
Q	
Quebec, Report on the Gulf St. Lawrence, by Dr. Wm. Wakeham	152 172
R	
Revenue, statements of  Comparative statement of  Report of Deputy Minister  Report of Inspectors. (See also each province.)  Restigouche Hatchery, N.B	39 41 xiii. 279 31, 88 150 268 86 264 275 261 262
S	
St. John River, District, N.B.  Hatchery, N.B.  Sandwich Hatchery, Ont.  Saguenay County, North Shore.  151 Salmon, remarks on.  Saskatchewan, report and statistics by Insp. E. W. Miller.  Sheasgreen, Isaac, officer Miramichi Hatchery, N.B.  Shelburne County returns.  Skeena River Hatchery, B.C.  Spain, O. G. V., Commanding Marine Service of Canada.  Special Reports by Prof. E. E. Prince.  Staff, Outside officers.	5, 215
Statistics of Fisheries. (See each province.)	

### 8-9 EDWARD VII., A. 1909

	Page.
Statements recapitulating the value of fish since 1870	xxviii.
Fishing gear, &c	
Number of fishermen	xxxiii.
the catch of fish in detail. (See each province.)	
Sword, C.B., Inspector, B.C	- 215
Stuart Lake Hatchery, B.C	<b>27</b> 0
St. Alexis Hatchery	277
NO INCOME	
T	
*	
Tadoussac Hatchery report	277
Taylor, E. G., Inspector, reports in B.C	269
U	
	800
United States fishing vessels, Modus Vivendi licenses	289
V	
Value of Fisheries. (See also each province.)	
Victoria County, N.S	82, 92
W	
Walker, John, Hatchery officer, report	272
Wakeham, Wm., M.D., report on Gulf St. Lawrence fisheries	144
Westmorland County, N.B., returns	
Windsor Hatchery, N.S	283
Winnipegosis Lake	204
Williams, J. T., Insp. of Fisheries Northern B.C., report	215
Whitewell, Thos., Hatchery officer, B.C	266
Whaling, by Capt. Bernier	236
Y	
Yarmouth County returns	. 86. 128
Young, Wm. S., Inspector, Manitoba, reports.	
	202

### DEPUTY MINISTER'S REPORT

To the Honourable L. P. Brodeur,
Minister of Marine and Fisheries.

SIR,—I have the honour to submit the annual Fisheries Report of this department for the fiscal year ending on March 31 last. There are embraced in this report the customary statements of expenditure and revenue, and the several reports of the district inspectors of fisheries, together with reports on work of the fish hatcheries operated under Dominion auspices in the various provinces, fishery protection service, &c. A review of the fishing bounty system during the fiscal year, and condensed summaries follow of the Fishery Commissions in British Columbia, Western Ontario (Georgian Bay and North Channel) and in the Bay of Fundy waters, the last-named having in hand the investigation of the shad fisheries of Nova Scotia and New Brunswick. These commissions have either already completed their work and submitted their reports and recommendations, or are on the eve of doing so. References to the work of the three biological stations, whose researches are conducted under the Dominion Commissioner of Fisheries, are also given, but full reports on the results achieved will be published in separate form as Part III. of the Contributions to Canadian Biology, of which Part I. and Part II. have already been issued.

Two special reports, it may be added, by Professor E. E. Prince, Commissioner of Fisheries, are appended to this report, the subjects treated being: 'The Life-history and Movements of the Cod, Haddock, Mackerel and Halibut,' and 'The Migrations of Sea Fish, with some results of marking fish.'

There are 16 appendices which follow this report in the following order:-

- No. 1. Fishing Bounties.
  - 2. Fisheries, Expenditure and Revenue.
  - 3. New Brunswick Fisheries.
  - 4. Prince Edward Island Fisheries.
  - 5. Nova Scotia Fisheries.
  - 6. Quebec Fisheries.
  - 7. Ontario Fisheries.
  - 8. Manitoba Fisheries.
  - 9. Saskatchewan Fisheries.
  - 10. Alberta Fisheries.
  - 11. British Columbia Fisheries.
  - 12. Arctic Regions.
  - 13. Fish Breeding Operations.
  - 14. Fisheries Protection Service.
  - 15. Fisheries Museum.
  - 16. List of Fishery Officers (outside staff).

### BAY OF FUNDY SHAD COMMISSION.

The serious decline and threatened extinction of the valuable shad fisheries of the Bay of Fundy and connected waters have aroused widespread attention in the maritime Petitions and representations have been made to the honourable the Minister of Marine and Fisheries which culminated in an important meeting in the hall of the Legislative Council, Provincial Buildings; Halifax. N.S., on Wednesday, March 1, when Professor Prince was invited to be present. The chair was occupied by the Hon. M. H. Goudge, president of the council, and there were present Hon. C. N. Cummings, Hon. W. T. Pipes, Hon. B. F. Pearson, Dr. Kendall, Hon. A. M. Gidney, Mr. S. F. Morrison and other prominent men, and the value of the shad industry, and the salmon fisheries in the same waters, was emphasized. As a result of that meeting a commission was appointed, consisting of Professor Prince, Commissioner of Fisheries, Mr. S. F. Morrison, Folly Village, N.S., and Mr. Simon Melanson, Moncton, N.B., and a series of thirty-two sittings has been arranged at Digby, N.S., Annapolis, Scott's Bay, Wolfeville, Windsor, East Noel, Noel, Maitland. Shubenacadie, Elmsdale, Halifax, Stewiacke, Folly Village, Great Village, Bass River. Amherst, Minudie, Wood Point, Truro, Pré d'en Haut, Moneton, Salisbury, Alma, Riverside, St. John, Hampton, Lorneville, Dorchester, Gardners Creek, and St. Martins. A thorough inquiry will be carried out and an exhaustive report with recommendations, will be made at the close of the sittings during the present year.

### GEORGIAN BAY FISHERY COMMISSION.

This commission, consisting of Professor E. E. Prince, as chairman, and Mr. John Birnie, K.C., and Mr. James Noble, as commissioners, concluded its sittings, and early in the year met in Ottawa, completed its report, which was duly signed by the three members of the commission, and submitted to the honourable the minister to be laid on the tables of the House of Commons. The report as issued consists of about 60 pages, and includes two appendices, viz.: an interim report, presented early in the previous year on a proposed game fish preserve in Georgian Bay; and a special report on the Squaw Island fishery grievances; and a map is appended graphically showing the large amount of gill-nets set at the present time in Georgian Bay waters.

Such general interest was excited by the very successful work of the commissioners that their duties were added to by being required to investigate the waters of Lake Erie, including the Detroit river, St. Clair river and lake, Thames river and Niagara river waters. Nearly twenty additional sittings were arranged to comply with these instructions, and during the summer of 1908 the whole of the fisheries will be inquired into, concluding at Fort Erie and Niagara Falls, before the close of the fishing season. A voluminous report has been already partly prepared based on the evidence taken on Detroit river, and westward of Lake Erie, embracing the fish and fisheries of Lambton. Essex, Kent, Elgin and Norfolk counties. The concluding investigations and sittings for taking evidence from fishermen and others from Norfolk county east to Welland, will be followed in the fall by the preparation of a valuable and claborate report on the whitefish, lake herring, pickerel or pike-perch, sturgeon and coarse fish fisheries of the waters referred to, and the question of fish-culture as carried out in Canada

and in the several states bordering on Lake Erie will be discussed at length. The report and recommendations will be embodied in a report to be presented as early as possible next year.

### BRITISH COLUMBIA FISHERIES COMMISSION.

In the Fisheries Report for 1907 and for 1906, the work of this large commission was referred to with some amount of detail, and it remains only to say that the great labours undertaken in accordance with the terms of the order in council, dated July 22, 100, and covering more than two years ended with the publication of the commission's report early in the year 1008. It is the most elaborate and inclusive report on the Positie Esheries of Canada ever published and no phase of these famous and valuable industries is similarly in the reference in all future studies into or inquiries about the British Leitmetta salmer, deep-sea and inshere risheries. The commissioners were Professor E. E. Prince, Dominion Commissioner of Fisheries, Ottawa, chairman; Messrs, lampted Sweener, John C. Brown, Richard Hall, J. P. Babcock and Rev. G. W. Taylor, with Mr. J. Charles McIntosh as secretary, and their report, after giving details of the appointment of the commission, particulars of the sittings, and the conferences with the authorities in Washington State, U.S.A., treats of the following subjects:—

Recent developments affecting British Columbian salmon industry:-

- 1. United States drain on the Fraser river salmon supply.
- 2. Washington State canneries and Puget Sound fishing.
- 3. Alaskan fisheries.
- 4. Cheapness of Alaska fish, and abundance.

Dependence of Washington State salmon industry on Fraser river.

Difficulties confronting British Columbian salmon industry:-

- (a.) Increase in number of canneries.
- Salmen caring, freezing and other industries, increase price and demand for raw material (fresh salmon).
- (c.) Searcity of labour, white, Indian and Chinese.
- (d.) Fluctuation in supply of salmon.
- (e.) Japanese in British Columbia.

Growth of British Columbian fisheries.

Opening of foreign and other markets.

Government brand, Desirability of:-

- (a.) Salmon brand.
  - (b.) Herring brand.

Fish offal question.

Hecate Straits question.

Obstruction to the ascent of salmon, &c., in rivers and other waters.

Better fishery police patrol service.

Fishery leases.

Salmon fishing and canning licenses.

Salmon trap-net question.

23-03

Oyster and clam leases and licenses. Steam trawling in British Columbia waters. Export of certain fish.

General review of fish and fisheries of the province:—Trout and angling—Halibut—Oulachon—Herring—Sturgeon—Smelt, pilchard, anchovy, shad and sardine—Cod—Black cod—Cultus cod, Red cod, &c.—Oyster—Clam—Abalone—Dogfish—Whaling.

Indian claims—Hatcheries—Planting lobsters, oysters, &c.—Seals—Statistics—Necessity of revision of British Columbian laws.

The recommendations cover no less than forty-three or forty-four separate subjects, which may be briefly summarized as follows:—

### General Subjects-

Foreign fishing vessels in territorial waters.

Use of fish for manure and oil.

Observance of weekly close time for fish.

Increased fine of \$250 to be provided.

Purse seines to be used for salmon fishing only.

### Salmon Industry—

Fraser river.

Northern rivers and inlets.

Vancouver Island rivers.

### Inshore Fisheries-

Herring.

Cod.

Rock cod.

Oulachon, smelt, &c.

Sturgeon.

Pilchard. &c.

Black cod.

### Deep-sea Fisheries-

Halibut.

True cod.

Black cod or skill.

### Shell Fish Fisheries.

Oyster.

Clam.

Abalone or ear shell.

### Crab Fishing, etc.—

Crabs.

Prawns, &c.

River and Lake Fisheries-

Settlers' and farmers' fishing operations. Angling and sport fishing. Indian fishing claims.

### Whaling Industry—

Licensed whale factories.
Whale supply.
Protective measures.

### Miscellaneous Fishery Matters-

Fish offal and inspection of canneries.
Utilization of dog-fish and other oil producing fish.
Territorial jurisdiction on Pacific coast.
Obstructions on rivers, &c.
Improved river and sea police patrol.
Fishery leases.
Fishing and canning licenses.
Trap-net question.
Oyster and clam leases.
Steam trawling question.

### Hatcheries and Improvement of Fish Supply—

Extension of fish culture.

Planting of lobsters and eastern oysters.

To these recommendations the whole of the six commissioners appended their names, a very remarkable evidence of thorough work, and exhaustive discussion, when the vastness of the field covered and the variety of conflicting interests is considered.

Two of the commissioners appended a minority report, dealing with some special phases of the salmon fisheries, while one of the commissioners stated his dissent on two or three matters, these minority views being appended to the main report.

A new code of British Columbia fishery regulations has been legalized based on the commission's recommendations, and following the lines of the draft regulations forming Appendix D of the main report. The commission condensed its information and its conclusions in a report of about 112 pages, including a very full index of seven pages and the whole forms a publication of unique value and national moment.

### BIOLOGICAL STATIONS.

### MARINE BIOLOGICAL STATION OF CANADA.

The movable wooden station which for ten years has been the centre of Canadian fishery researches on the Atlantic coast has this year been replaced by a permanent station at St. Andrews, New Brunswick. For the season of 1908 Professor D. P. Penhallow consented to take charge and superintend the building operations. Pro-

fessor McBride, Professor McMurrich, Dr. Stafford and a large staff of biological experts form Dr. Penhallow's research reorganization, and with the completion of the fine buildings projected Canada will possess a station for fishery investigation not excelled by that of any other country.

A series of highly important and pressing problems relating to the fisheries has been decided upon as subjects for study and for solution during the year, and if the buildings are sufficiently completed and equipped to allow of the staff conducting these researches a fruitful season is anticipated. Part of the summer will be spent on the Prince Edward Island oyster beds supplementing the work carried on by the station when it was located at Malpeque. The movable station on its scow was to have been taken to Seven Islands; but it is at present at Grand Valley on the Gaspé peninsula, after being located for two years in Gaspé Basin in accordance with the course adopted by the Biological Board, since the operations of the institution started nine years ago. At each site, to which this movable scientific laboratory has been towed, the rule has been observed to devote at least two years to the thorough investigation of the locality, the first year being usually occupied with what may be called a preliminary survey of the faunistic peculiarities of the neighbouring waters, while the second year has been devoted to special detailed problems, and the carrying on of marine researches bearing directly on the more vital fishery questions characteristic of the locality. Dr. Stafford, the energetic curator of the station, who had officially reported that he had had 'a good year' during the first season, especially in discovering the distribution of the vertebrate and invertebrate life in the waters of Gaspé Basin, and in the Gulf of St. Lawrence outside, followed up his faunistic investigations, and added substantially to the list of animals inhabiting the Atlantic waters of Canada, the first portion of which list has been for some time in the press, but has not yet been issued. The abundance of important food-fishes directly depends upon the plenitude or the paucity of the living organisms which constitute the characteristic fauna of each inshore or deep-sea area. Hence the great importance of a thorough faunistic survey in each locality along the coast. Professor A. P. Knight, of Queen's University, Kingston, who has been most assiduous in his attendance at the station almost continuously since the foundation of the institution in 1898, and whose letter addressed to the Royal Society in 1895 may be said to have originally initiated the movement for a marine laboratory for fishery and allied scientific investigations, devised a series of valuable and interesting experiments on the relative merits, or comparative attractiveness, of various kinds of bait. The effectiveness, in carrying on fishing operations, of fresh and of frozen bait has been under discussion by practical men for many years, and the carrying out by the Dominion government of a fishermen's bait--freezer scheme, during the past few seasons along the Atlantic shores, has intensified the interest of the controversy; hence the necessity of an exact and unbiased investigation such as that carried out by Dr. Knight, at the Biological station at Gaspé, last season. The results of the research have not yet been published, but the report in preparation will be of unique interest, and certainly of exceptional practical value, when it is issued, in a forthcoming part of the 'Contributions to Canadian Biology,' under which title the researches of the station staff are published. Professor MacBride had hoped to return from England in time to have taken part in

the work at Gaspé last year, but this proved impossible, and the director, Professor Prince, and the assistant director, Professor R. Ramsay Wright, were detained by pressing duties, so that neither of them could take part in the investigations carried on. Amongst the staff of workers, in addition to Dr. Stafford, lecturer upon zoology in McGill University, Montreal, were several senior and junior students, with distinguished records in science in McGill University.

At the meeting of the Biological Board in Ottawa last May, the important recommendation of the British Columbia Fisheries' Commission, of which Professor Prince, as Dominion Commissioner of Fisheries, is chairman, was brought up, urging that a biological station be established on the Pacific coast. The fishery problems in British Columbia waters, are many and pressing, and the board decided to take steps in that direction desired by the commission. The board had the advantage of a conference with one of the British Columbia Commissioners and a distinguished Fellow of the Royal Society, the Rev. George W. Taylor, of Wellington, Nanaimo, B.C., who aided the board materially in considering the question. Inasmuch as United States' biologists have, for many years, resorted to the rich waters of British Columbia for biological research and have carried off great stores of most valuable scientific material, and as one United States' marine station has been equipped and has carried on work, on the west coast of Vancouver Island, for a number of years past, the urgency of an adequately equipped station, under the auspices of the Dominion government, requires no supporting argument. Nowhere else on the North American continent is there a field so prolific and so inviting as these unparalleled waters of the great Pacific province of Canada. It is satisfactory to know that the project has the hearty sympathy and support of the Honourable Mr. Brodeur, Minister of Marine and Fisheries, and there is every certainty that provision will be made by the Dominion government for the building of a station and its appropriate equipment.

It may be added that, during the summer of 1907, the Atlantic station was moved to the north shore of the St. Lawrence, near Seven Islands, where the whaling operations, carried on, will afford valuable material for study, and the work of the whaling depot can be studied with a view to estimating the effects upon the whale supply, and the best measures for preserving and developing an industry so valuable and important.

### PACIFIC COAST BIOLOGICAL STATION.

An admirable site for a biological station in British Columbia was selected by Professors Prince and Ramsay Wright when they were on the Pacific coast in the fall of 1907. A very distinguished zoologist long resident on the Pacific coast, the Rev. George W. Taylor, had long urged that a station should be built on the shore of Departure bay, near Nanaimo. Through the kindness of Mrs. Dunsmuir and the generous offices of His Honour the Lieutenant Governor of the province, a parcel of land was secured on nominal terms which with the additional site secured, provides a site which could not be surpassed. The waters, rich in fish and marine life, are close by the site where the buildings of the laboratory are to be erected and completed this year, and already a staff of workers from eastern and western Canada have signified

their intention of carrying on investigations bearing on the fisheries as soon as accommodation is provided. The hope of those interested in the advance of fishery knowledge and expansion of the fisheries will be soon realized. As was said in a presidential address to the Biological Station of the Royal Society of Canada (Trans. R.S.C., Vol. I., 3rd Series 1907-8).

'The project for a marine biological station for British Columbia has never been allowed wholly to remain in abeyance, and enthusiastic scientists have never ceased to harbour the hope that the Dominion government would realize the necessity of scientific investigation in the Pacific waters as appropriately as they did on the Atlantic coast.'

The results of the first season's work at the splendid British Columbia station will be included in the separate biological report already referred to.

### GEORGIAN BAY BIOLOGICAL STATION.

This station, which is now conducted under the Biological Board did some interesting work last year, under the able curatorship of Dr. B. Arthur Bensley. The fishery researches commenced on the 2nd of July, and the following naturalists took advantage of the station for investigations, viz.:—

Mr. J. W. Firth, B.A., Mr. W. A. McCubbin, and Mr. P. I. Bryce, the latter two students of the University of Toronto.

The special work was conducted according to the suggestions made by the director, Professor Prince, at the beginning of the season and, with the exception of certain questions on pound-and-drift-nets in connection with which the staff were unable to obtain material, good results were secured.

A small sum of money was paid to a regular fisherman for the privilege of examining all of the fish taken from his nets and of taking samples when necessary. In this way measurements of the whitefish and lake trout taken in gill nets of the regular mesh were made, also the condition of the fish observed when brought to the surface; and the effect of injuring or scaling of live fish in the nets. In order to facilitate this work a special net was procured made up of small lengths of different mesh. It was found, however, that parts of the net were not properly hung for fishing these waters and there was not sufficient time to remodel the net and continue operations.

It was arranged for Mr. Firth to obtain samples of whitefish for experiments on their keeping qualities when taken from shallow or deep water. Several trials were made for deep-water fish; but it was not possible to obtain shore whitefish on account of the lateness of the season for comparison with deep-water whitefish. Mr. Bryce undertook two visits to the southern end of Georgian Bay for the collection of carp for food examination. About forty fish were taken for this purpose.

It was not possible to obtain access during the summer to localities where pound nets are operated; but experiments were made to show the behaviour of different kinds of shore fishes when entrapped and the sizes of mesh necessary to allow of their escape, and reports are being prepared.

During the summer there were completed some repairs and improvements to the buildings. The station house which had been damaged by wind storms was straightened and a verandah added to each end. The whole structure was firmly guyed to the rock in order to prevent further possible damage from the same source. A permanent dock 12×20 feet was constructed at the boathouse to replace the former float. The small building formerly used as a storeroom was sheeted inside and made water tight to serve as a library. A new building 10×20 feet was constructed on a scow belonging to the station to serve as a floating laboratory for work in other parts of the bay. This building contains a small laboratory room 10×10, a small kitchen 6×10 and two closets. Several minor improvements were made in the main laboratory and all five buildings of the station were painted.

A gasoline engine of  $1\frac{1}{2}$  horse power was added to the equipment and installed in the larger of the two rowboats belonging to the station. On the whole a successful and profitable season was completed at the institution.

### GENERAL STATISTICS RE FISHERIES.

### EXTENT OF CANADIAN COAST.

The fisheries of Canada are the most extensive in the world, extending over an immense sea coast line, besides innumerable lakes and streams.

The eastern sea coast of the maritime provinces from the Bay of Fundy to the Straits of Belle Isle covers a distance of 5,600 miles, which is more than double that of Great Britain and Ireland. The salt water inshore area, not including minor indentations, covers more than fifteen thousand square miles, without the numerous lakes in Manitoba and other western districts, all stocked with excellent species of food fish.

### FISHERIES EXPENDITURE AND REVENUE.

The statement of the total expenditure for the different services connected with the fisheries of Canada during the fiscal year ending March 31 last, forms Appendix II. of this publication, page 30.

The total fisheries expenditure amounts to \$956,196, subdivided as follows:—Fisheries proper, \$157,874; fish-breeding, \$235,660; fisheries protection service, \$225,-280; miscellaneous expenditure, \$181,267, and also \$156,114 distributed as fishing bounties.

The total amount received as revenue from fishing licenses, fines, &c., during the same period in the different provinces of Canada was \$90,686. This sum includes \$10,000 received from the United States fishing fleet as *modus vivendi* fees. (See statement p. 39 of this report).

A comparative statement of all expenditure and revenue for the last eighteen years concludes Appendix No. 2.

Fuller details of the different fishery expenditures will be found in the Auditor General's report under their different headings.

### BOUNTIES FOR FISHING.

The deep-sea fishermen of the maritime provinces received the sum of \$156,114 as bounties on their respective catches of sea fish for the season of 1907.

Of this amount the owners of 927 fishing vessels and their crews received \$61,785. The balance, \$94,329, was distributed amongst 20,520 boat fishermen.

For the year 1907, the province of Nova Scotia received \$93,381; Quebec, \$36,102; New Brunswick, \$16,454, and Prince Edward Island, \$10,175.

Since its inception (1882) the sum of \$4,105,815 has been distributed to the deepsea fishermen of the above named maritime provinces to better enable them to develop their industry.

The regulations governing the payment of such fishing bounties as well as the particulars respecting their distribution forms the first appendix of this publication.

### VALUE OF THE FISHERIES OF CANADA.

The whole catch of fish in our waters by Canadians, including fish products, seals. &c., during the season of 1907, comprising the winter fishing of 1908 to March 31, is valued at twenty-five million and a half dollars. This is a falling off of three-quarters of a million dollars, as compared with the production of 1906.

As noticed in the following table, the handsome increases in New Brunswick. Prince Edward Island and Ontario are more than counterbalanced by the decreases in other provinces, British Columbia more than accounting for the deficiency.

The following table shows the total value of the fisheries of each province in their respective order of rank with the increase or decrease as compared with the year 1906:—

Provinces.	Value of Fish.	Increase.	Decrease.
	\$	\$	\$
Nova Scotia British Columbia New Brunswick	7,632,330 6,122,923 5,300,564	395,339	166,830 880,424
Quebec. Ontario. Prince Edward Island.	2,047,390 1,935,025	200,169	127,645
Manitoba Saskatchewan	1,492,695	323,756	524,501
Totals	25,499,349	919,264	1,699,400
Net decrease			780,136

The most important fluctuations is the decline noticed in British Columbia, attributed chiefly to the shortage in the salmon run on the Pacific coast.

The falling off in the inland western provinces of the Dominion is even more pronounced than last year. The question of facilities for reaching profitable markets for fish in the great west is a very important factor to the producer.

The various features in the fisheries of each province are fully treated by the different inspectors of fisheries in their reports, forming the appendices numbered three to twelve.

The following statement shows the relative values of the principal kinds of the commercial fishes above \$100,000 for the year 1907, as compared with those of previous year:—

Kinds of Fish.	Value.	Increase.	Decrease.
	\$	\$	\$
Salmon Lobsters Cod. Herring Mackerel Halibut Haddock Smelts	5,014,446 4,084,122 3,619,818 2,073,756 981,506 841,387 799,230	661,195 148,632 157,547 32,334	630,840 388,222
Whitefish Trout Sardines Pickerel Hake	775,866 688,466 676,892 665,597 586,489 568,993	350,235 	218,293 114,575 126,948
Clams, quahaugs, &c. Pollock Pike Oysters. Alewives Sturgeon	458,780 413,165 294,738 183,993 131,351 122,321	60,146	17,815 10,862 8,338 18,414

The quantity of fish used as bait in the season of 1907 is valued at \$518,022 and that as fish oil at \$539,067.

The fur seal skins secured by the British Columbia pelagic sealers during the same period only amounted to \$108,152; being a decrease of over \$200,000. This season the capture, 94 sea-otters, realizing nearly \$13,000, may be added to the fur industry of the western province.

Of the twenty kinds of fish yielding above \$100,000 each, the number of increases and decreases are about equally divided.

Apart from salmon, which still heads the list with a value of \$5,000,000, although showing a decrease of three-fourths of a million, the principal fluctuations are the large yield noticed in lobsters as well as the decline in herring of almost an equal value of over \$600,000. The large increase of \$350,000 in smelts is more than wiped out by the decline in the mackerel fishery.

There is a fair increase in cod, haddock, hake and halibut. A falling off is to be noticed in the yield of the two principal kinds in fresh water fish—whitefish and salmon trout.

8-9 EDWARD VII., A. 1909

The clam fishery, principally the variety known as quahaugs, shows a noticeable increase, of about \$60,000.

The other changes in the value of fishes are of smaller importance.

From the year 1869 to 1907, inclusive, the five principal commercial sea-fishes have yielded the following value:—

Cod	 	 	 	 	 	 	 \$143,134,571
Salmon	 	 	 	 	 	 	 101,804,665
Lobsters	 	 		 	 	 	 87,375,675
Herring	 	 		 	 	 	 77,343,921
Mackerel.	 	 	 	 	 	 	 48.398.478

### EXPORT OF FISH.

During the last fiscal year ended March 31, 1908, the fish and fish products, including marine animals, exported from Canada to foreign countries, chiefly to the United States and Great Britain, amounted to \$13,906,567.

### RECAPITULATION.

Or the Yield and Value of the Fisheries of the Dominion of Canada for the Year 1907.

Number.	Kinds of Fish.	Quantity.	Value.	Total.
1 2 3	Cod, dried	693,955 6,895,900 1,669	\$ 3,372,516 230,612 16,690	\$
4 5 6	Haddock, dried. Cwt.  "fresh. Lb. "smoked (finnan haddies) "	75,002 12,601,365 2,658,170	261,699 378,041 159,490	3,619,818
7 8	Hake, dried	183,560 142,995	524,148 44,845	799,230
9 10 11 12 13 14 15 16	Pollock	137,725 1,977,225 15,578,985 1,391,670 26,043,534 9,218,879 447,380 13,960,290	3,280,728 945,222 47,686 740,810	568,993 413,165 59,317 841,387 41,750
17 18 19 20 21 22 23 24 25	Trout (all kinds)       "         Ouananiche       "         Whitefish       "         Smelts       "         Oulachons       "         Herring, salted       Brls.         " fresh       Lb.         " smoked       "         " kippered       "	6,944,218 42,000 8,853,660 10,470,324 548,300 279,789 35,074,657 7,170,210 263,190	1,302,698 546,002 198,737 26,319	5,014,446 676,892 4,200 688,466 775,866 27,855
26 27	Sardines, preserved in cans " " fresh or salted Brls.	5,700,000 253,000	285,000 - 380,597	665,597
28 29 30 31 32 33	Shad	5,230 29,892 5,677,730 4,920 6,969 779,800	69,690 46,788	54,336 131,351 294,738 492 116,478
34 35 36 37	Perch "Pickerel "Bass (achigan) "sea B. "	1,258,482 7,589,302 204,290 7,200	20,389	61,694 586,489 21,109
38 39	Mackerel, salted. Brls. " fresh Lb.	. 42,207 2,903,340	633,105 348,401	981,506
40 41	Sturgeon	766,255 46,437	78,035 44,286	122,321
42 43	Lobsters, preserved "  " fresh or alive Cwt.	8,660,5°0 97,490	3,198,172 885,950	4,084,122
44 45 46 47 48	Oysters. Brls. Clams, quahaugs, scallops, &c "Squid. "Coarse and mixed fish "Lb.	27,299 6,009 16,788	33,576 642,900	183,993 458,780 24,036
49 50 51 52 53 54 55	Fur seal skins in B.C. No. Hair seal skins " Sea otter skins " Beluga skins " Fish used as bait Brls. " fertilizer. " Fish oil Galls.	5,567 30,528 38 56 345,349		108,152 34,680 12,558 224 518,022 217,987 539,067

8-9 EDWARD VII., A. 1909

### RECAPITU

Showing the whole production of the Fisheries in the

	Kinds of Fish.	Nova	SCOTIA.	British	COLUMBIA.	Nı
-	Kings of rish.	Quàntity.	Value.	Quantity.	Value.	Quantit
			\$		\$	
Ì	Cod, dried Cwt.	400,112				80,9
	fresh or green Lb. tongues and sounds Brls.	5,580,400	167,412	744,900	41,434	202,8
	Haddock, dried	66,906	234,171			4,9
	" fresh Lb.	11,056,065	331.682			1,486,2
	" smoked (finnan haddies)" Hake, driedCwt.	2,549,870 126,400	152,992			108,3
	sound. Lb.	75,408	18.852			46,2 45,7
	Pollock Cwt. Tom cod or frost fish Lb. Halibut	111.845	335,535			25,8
	Tom cod or frost fish Lb.	172,800	5,184	14 004 505		1,678.0
		847,741 723,670	84,774 21,710	14,304,725	715,236	153,2 668,0
	Salmon, preserved in cans " fresh"	10,170	1,526		3,278,512	4,6
	" tresh "	880,604		26,028,768 5,659,285	320,138	1,837.7
	smoked	14,280		417,900 13,846,800	41,790 732,305	15,2
	Trout (of all kinds)	169,920	16,992	212,300	21,230	186,4
	Ouananiche					100,5
	Smelts	554,447	90 201	400 700	00 10	5,6
	Oulachons	554,447	29,591	463,700 548,300		8,349,0
	Oulachons	84,890		540,500	21,000	159,
	ii fresh Lb.	7,020,370				2,186,0
	smoked	669,270	13,385	192,200	19,220	5,556,7
1	Sardines, preserved in cans Cons					263,1 $5,700,0$
- }	fresh or salted Brls.			* * * * *		252,2
	Shad	773 9,579	7,730	50	500	4,3
	Pike Lb.	9,579	38,316	****		19,7
	Pike Lb. Maskinongé Lb.					
	Baskinorge "I" Eels, salted Brls. " fresh Lb. Perch "	2,816	28,160			3,2
	Perch					
	I ICKETET				* * - * * * * * * *	42,2
-	Bass (achigan)	12,240	1,224			142,6
	m sea B	24,162				
	Mackerel, salted Brls. fresh Lb.	2,451,340	294,161			$\frac{3}{334,7}$
4	Sturgeon		2013101	100,000	5,000	9,5
1	caviare and bladdersLobsters, preserved	0.070.946	1 001 104			3
	u fresh or alive	2,270,346 84,279	771 250	• • • • • • • • • • • • • • • • • • • •		2,731,0
	Jysters Brls	1,337	8,022	855	5,985	12,4 15,4
- 10	Jiams, quanaugs, scallops	22,162	44,324		18,540	
-10	Coarse and mixed fish	4,938				1,0
	Fur seal skins in B.C. Lb.		89,022	* * * * * * * * * * * *	190,375	16,4
	Fur seal skins in B.C	170		5,397	107.940	68,3
6	Jan akh lii	170	212	5,160	2,970	
	Beluga skins			38	12,558	
13	Fish used as bait	86,434	129,651		• • • • • • • • • • • •	12,43
1	n fertilizer	114,497	57,248		32,363	213,1
	" off Galls.	195,019	58,506		332,322	58,8

SESSIONAL PAPER No. 22 LATION.

different Provinces of Canada for the year 1907-8.

Brunswick.	VICK. QUEBEC.		Onta	ARIO.	P. E. I	SLAND.	Manitoba, Saskatchewan and Alberta.			
Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.		
\$	8Y 1	\$		\$		\$		. \$		
404,610	194,518	875,331		tu e e u e e elle e e	18,403	92,015				
8,112	367,800	13,654				930	* * * * * * * * * * * * * * * * * * * *			
3,360 17,171	139 1,615	4,845			93 1,575	5.512				
44,586	6,000	180			53,100	1,593				
6,498					10,918	32,754				
115,605 $20,542$					01 000	E 457				
77,580					21,803 20 425	50				
77,580 50,340 15,325	126,000	3,780			425	13				
20,040	215,209	3,780 26,052								
690			,							
344,235 3,040	836,290	125,443			5,000	1,000				
3,040	113,490	8,505					,			
18,720	186,950	18,695	5,980,828	586,873	22,820	2,282	185,000	12,100		
840	42,000 40,570	4,200 4,057	3,241,490	290 410	22,820			262 150		
667,932		10,116	0,241,400	520, 110	900,850	45,042		363,150		
		mo oot				04.000				
716,790 21,860	17,398 1,422,800 592,040	78,291 14,228 11,841	1,065 4,881,387	10,650 244,069	16,876 217,600 160,000	84,380 2,176 3,200		,		
21,860 151,091 26,319	592,040	11,841	1,001,007	211,000	160,000	3,200				
26,319										
285,000 378,404	721	2,193								
44,920	82	1,186			570					
90,755			0.404.040		570	2,280	0.010.000	111,025		
	179,800 4,920		2,184,040	174,723			3,313,890	111,025		
32,870	128	1,280			738	7,380				
	729,800	.43,788	50,000	3,000	738					
2,954	142,800 132,350	7,140 $13,235$	1,033,682 3,192,252	51,684 210 225			82,000 4 999 500	2,870 251,075		
14,220	40.450	4.045		010,220						
	7,200	720 188,550 3,216 3,493								
5,325 40,164	12,570 26,800	188,550	• • • • • • • • •		5,120 90,500	76,800 10,860	999 000			
760		3,493		47,482	50,500	10,000	222,000	21,300 17,500		
315			28,587	47,482 26,471		851,847	222,000 17,500	17,500		
819,304 109,210	819,723 90	245,917 450			2,839,489 $720$	5,040				
92,610					0.679	77,376 100,362	-			
295,224	165	330			0,012	100,362 610				
4,284 $32,818$	74	148			305	610				
4,098		19,574	2,730,615	150,429			6,824,700	189,402		
70~										
105	25,284	31,605								
	56	224			51,495 2,825 12,250					
186,472	83,105	124,657			51,495	77,242				
107,825 17,641	35,452 $423,076$	$124,657 \\ 17,726 \\ 126,923$			2,825 12,250	2,825 3,675				
					12,200					
5,300,564		2.047.390		1,935,02		1 492 695		968,422		

RECAPITULATION showing the Total Value of the Fisheries in the respective Provinces of Canada, from 1870 to 1907 inclusive, as compiled from the Annual Reports of the Department of Fisheries.

6,577,301 9,577,301 11,681,309 11,1081,309 11,117,000 11,117,000 11,117,000 12,005,334 13,215,675 13,529,524 14,499,979 16,824,010 16,824,010 16,824,010 16,824,010 17,722,494 17,722,494 17,722,496 18,667,124 17,748,861 17,748,861 17,748,986 18,667,149 17,748,986 18,667,149 18,677,878 19,667,149 10,667,140 11,667,150 11,667, \$677,224,058 Total for Canada. 718,159 958,410 1,158,437 1,478,665 1,716,977 1,811,570 1,492,923 96S,422 18, 980 129, 084 180, 677 187, 679 232, 968 232, 968 232, 968 242, 968 242, 968 242, 968 242, 968 242, 968 242, 968 242, 968 242, 968 248, \$17,863,181 Saskatchewan No data. Manitoba Alberta. and 60 104,697
525,767
631,766
631,766
631,768
1,542,675
1,542,675
1,044,546
1,054,564
1,074,987
1,974,887
1,972,198
2,849,488
4,40,348
4,443,963
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,067
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,348,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,07
3,368,0 No data. \$111,575,319 British Columbia. 60 264,982 267,524 267,524 267,229 267,229 267,229 267,133 267,13 \$45,015,003 Ontario. 60 1,161,551 1,003,130 1,003, \$74,619,129 Quebec. 60 Prince Edward Island. 207, 595 288, 863 288, 863 288, 863 289, 872 289, 873 275, 688 275 ,059,193 ,050,623 ,887,024 ,099,510 ,998,922 ,168,939 \$36,945,339 No data. \$128,629,989 Brunswick. 00 4, 4, 019, 425
5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 5, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, 101, 039
6, ,226,034 ,347,604 ,809,152 ,989,548 ,351,753 ,841,602 \$262,576,078 Nova Scotia. 3,090,346 66 Totals 902.... 891.... Year. 1896. 1897. 1898. 1876.... 887... 881.... 1880.... 884... 885.... .....0681 ...8881 .886.. 1882.. 1889... 1892.. 1893.. 900. 899

# CAPITAL INVESTED IN THE FISHING INDUSTRY OF CANADA; NUMBER OF MEN EMPLOYED IN THE YEAR 1907.

During the fishing season of 1907, over 71,000 men were engaged in the fisheries of Canada, not including the thousands of persons employed in the lobster canning industry. These fishermen used nearly seven million fathoms of gill-nets and seines besides other fishing gear and fixtures, representing an aggregate capital of nearly fifteen million dollars. This is about a quarter million dollars over the total outlay of the previous season by a smaller number of fishermen.

The lobster plant alone is valued at over one million and a half, comprising all the equipment of nearly seven hundred canneries dispersed on the sea-coast of the maritime provinces as follows: Nova Scotia, 217; New Brunswick and Prince Edward Island, 184 each, and Quebec, 100.

This industry placed on the market nearly nine million cans of this preserved crustacean, besides about one million pounds disposed of alive or in a fresh state mostly in cities of the United States, both aggregating a value exceeding four million dollars.

The important branch of salmon preserving on the Pacific coast during the same period, consisting of seventy-five canneries, with all their equipments, valued at nearly two million dollars and giving employment to nearly 13,000 persons, produced over twenty-five million pounds of the preserved article, besides nearly as many pounds disposed of fresh or salted.

Not including the sealing fleet (which is still valued at \$367,650), the remaining invested capital in other fishery industries is given at over two million and a half of dollars.

Only fifteen vessels of the sealing fleet were hunting seals during the 1907 season; securing 5,397 skins, valued at \$107,940. Thirty-eight sea-otter skins were also secured at the same time.

# RECAPITULATION

Of the Value of Fishing Implements, Vessels, Boats, Nets, &c., including all capital invested in Fishing Industry of Canada, 1907.

	Total Value.	\$ 4,469,041 4,767,863 2,332,455 1,134,315 1,099,403 488,905 510,400 14,650 9,560	
fisher-	Approximate of freezers, ies and oth tures, &c.	\$ 2,544,546 626,735 305,960 135,585 242,900 627,385 242,900	
193	Value of lobs.	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
bns qs	Value of tra pound-nets	\$ 325,181 395,250 422,949 249,041 157,941 17,206 3,600	
D SEINES.	·sulaV	\$ 700,263 515,704 428,6098 172,654 983,684 45,114 107,025 8,150 6,030	
NETS AND SEINES.	Fathoms.	2,138,767 813,200 892,6455 229,645 2,038,694 96,721 623,613 54,000 43,990 6,931,284	
ATS.	.anlæV	\$ 374.793 325,613 2.946 305,079 206,130 134,625 54,855 54,800 2,500 2,500 2,500 2,500	:
BOATS	Number.	14,746 5,046 7,046 7,804 6,187 1,448 1,900 520 520 520 520 530 7,746 1,804 1,906 1,804 1,806 1,8	:
	.enlaV	\$ 1,017,320 619,100 346,358 169,170 32,950 287,620 24,570 132,800	
VESSELS	Tonnage.	20,268 2,740 2,550 4,850 1,826 2,7780 2,7780 36,90 <b>2</b>	:
	Number.	671 105 + 343 343 343 22 24 44 22 22 22 149 149 1590	:
FISHERMEN.	Boats.	18,509 12,273 13,012 11,115 2,455 3,401 705 1,270 1,270 63,165	11,201
	Vessels.	5,034 561 1,307 120 725 193 149 149 8,089	
	Provinces.	Nova Scotia. British Columbia. New Brunswick. Quebec. Ontario. Prince Edward Island. Manitoba. Saskatchewan. Alberta.	

† Sealing fleet; other equipment, \$16,346. ; Mostly tugs.

SESSIONA

RECAPITULATION.

STATEMENT of the Lobster Industry in Canada during the Season 1907-8.

OISS	NAL PAR	Total value BS of whole catch.	₩.	2,052,354 928,513 856,887 246,367	4,084,121
		Value.	<b>9</b> €	771,250 109,210 5,040 450	885,950
	Сатсн.	Fresh or alive.	Cwt.	84,279 12,401 720 90	97,490
1907–8.		Value,	₩	1,281,104 819,303 851,847 245,917	3,198,171
Statement of the Lobster Industry in Canada during the Season 1907-8.		Number of Cans.	Lb.	2,270,346 2,731,012 2,839,489 819,723	523,115 1,340,731 1,045,669 1,568,784 8,660,570
		Total Value of Plant.	<b>6</b> €	700,985 380,424 319,795 167,580	1,568,784
		Value,	<del>00</del>	491,005 265,824 206,860 81,980	1,045,669
	PLANT.	Number of Traps.		636,400 289,951 305,990 108,390	1,340,731
		Value.	<b>€</b>	209,980 114,600 112,935 85,600	523,115
		Number of Cannerries.		217 184 184 100	685
IENT of t	Number	Number of persons employed in Canneries.		3,254 3,860 2,655 1,673	11,442
	$-\mathrm{D}_2^1$	Provinces.		Nova Scotia New Brunswick Prince Edward Island	Totals.

8-9 EDWARD VII., A. 1909

Comparative Table showing Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries of Canada, together with the Value of Fishing Materials employed, from 1880 to 1907.

Year. –	Vessels.			Boats.		Value of Nets and	Value of other	Total Capital
	No.	Tonnage.	Value.	No.	Value.	Seines.	Fishing Material.	Invested.
			\$		\$	\$	\$ .	\$
1880	.1,181	45,323	1,814,688	25,266	716,352	985,978	419,564	3,936,582
1881	1,120	48,389	1,765,870	26,108	696,710	970,617	679,852	4,113,049
1882	1,140	42,845	1,749,717	26,747	833,137	1,351,193	823,938	4,757,988
1883	1,198	48,106	2,023,045	25,825	783,186	1,243,366	1,070,930	5,120,527
1884	1,182	42,747	1,866,711	24,287	741,727	1,191,579	1,224,646	5,014,66
1885	1,177	48,728	2,021,633	28,472	852,257	1,219,284	2,604,285	6,697,459
1886	1,133	44,605	1,890,411	28,187	850,545	1,263,152	2,720,187	6,814,29
1887	1,168	44,845	1,989,840	28,092	875,316	1,499,328	2,384,356	6,748,84
1888	1,137	33,247	2,017,558	27,384	859,953	1,594,992	2,390,502	6,863,00
1889	1,100	44,936	2,064,918	29,555	965,010	1,591,085	2,149,138	6,770,15
1890	1,069	43,084	2,152,790	29,803	924,346	1,695,358	2,600,147	7,372,64
1891	1,027	39,377	2,125,355	30,438	1,007,815	1,644,892	2,598,124	7,376,18
1892	988	37,205	2,112,875	30,513	1,041,972	1,475,043	3,017,945	7,647,83
1893	1,104	40,096	2,246,373	31,508	955,109	1,637,707	3,174,404	8,681,55
1894	1,178	41,768	2,409,029	34,102	1,009,189	1,921,352	4,099,546	9,439,11
1895	1,121	37,829	2,318,290	34,268	1,014,057	1,713,190	4,208,311	9,253,84
1896	1,217	42,447	2,041,130	35,398	1,110,920	2,146,934	4,527,267	9,826,25
1897	1,184	40,679	1,701,239	37,693	1,128,682	1,955,304	4,585,569	9,370,79
1898	1,154	38,011	1,707,180	38,675	1,136,943	2,075,928	4,940,046	9,860,09
1899	1,178	38,508	1,716,973	38,538	1,195,856	2,162,876	5,074,135	10,149,84
1900	1,212	41,307	1,940,329	38,930	1,248,171	2,405,860	5,395,765	10,990,12
1901	1,231	40,358	2,417,680	38,186	1,212,297	2,312,187	5,549,136	11,491,30
1902	1,296	49,888	2,620,661	41,667	1,199,598	2,103,621	5,382,079	11,305,98
1903	1,343	42,712	2,755,150	40,943	1,338,003	2,305,444	5,842,857	12,241,45
1904	1,316	43,025	2,592,527	41,938	1,376,165	2,189,666	6,198,584	12,356,94
1905	1,384	41,640	2,813,834	41,463	1,373,337	2,310,508	6,383,218	12,880,89
1906	1,439	40,827	2,841,875	39,634	1,462,374	2,426,341	7,824,975	14,555,56
1907	1,390	36,902	2,731,888	38,711	1,437,196	2,266,722	8,374,440	14,826,59

SESSIONAL PAPER No. 22

Comparative Table showing the Number of Men employed in the Fishing Industry since 1895.

Year.	Number of Persons in Lobster Canneries.	Number of Men in Vessels.	Number of Men in Boats.	Total Number of Fishermen.	Total Number of Persons in Fishing Industry.
1895	13,030	9,804	61,530	71,334	84,364
1896	14,175	9,735	65,502	75,237	89,412
1897	15,165	8,879	70,080	78,959	94,124
1898	16,548	8,657	72,877	81,534	98,082
1899	18,708	8,970	70,893	79,893	98,601
1900	18,205	9,205	71,859	81,064	99,269
1901	15,315	9,148	69,142	78,290	93,605
1902	13,563	9,123	68,678	77,801	91,364
1903	14,018	9,304	69,830	79,134	93,152
1904	13,981	9,236	68,109	77,345	91,326
1905	14,037	9,366	73,505	82,871	96,908
1906	12,317	8,458	67,646	76,104	88,421
1907	11,442	8,089	63,165	71,254	82,696

### BAIT FREEZERS.

The report on bait-freezers during the season of 1907 was also received in time to be printed as an appendix of last year's report. (See page 287 of that report).

Twelve new freezers had been completed during the last year, seven in Nova Scotia, one in New Brunswick and four in Quebec.

Altogether there are now thirty-seven bait freezers in Nova Scotia, three in New Brunswick, five in Prince Edward Island and fourteen in Quebec.

### FISHERIES PROTECTION SERVICE.

The report of this service forming Appendix No. 14 of this publication, will be found on page 287. The same cruisers with mostly the same commanding officers as previously, again patrolled the Atlantic coast, the *Kestrel* and *Falcon* the Pacific, while the *Vigilant* cruised the Lake Erie.

A glance at the long list of foreign vessels calling and using our ports, proves their importance to these foreigners.

### FISH-BREEDING.

The report on this service by Prof. Prince forms appendix 13 of this publication and embraces a review of the operations for the fiscal year ended March 31, 1908.

Additional hatcheries have been constructed in the various provinces of the Dominion and improvements made in the interior fittings of some of the establishments.

During the season of 1907, some 813 millions of fry embracing such species as lobsters, whitefish, salmon, trout and pickerel were successfully distributed.

Reports on this important service by the commissioner of fisheries, the superintendent of fish culture and on individual hatcheries by the respective officers in charge will be found in appendix 13.

### OYSTER CULTURE.

The operations in this branch of the service necessarily close with the calendar year, and those for the season of 1907 were published in the report of that year. (See Fisheries report, 1907, p. 281).

### OTTAWA FISHERIES MUSEUM.

Mr. A. Halkett, the curator of the museum, submits a summary of the continuation of the collections of specimens with description of the vertibrate portion, especially the fishes.

This article forms appendix No. 15 of this report and will be a valuable addition to the continuation of previous reports, published since 1905.

### THE FISHERIES STAFF.

The outside staff of the fisheries branch of this department numbers nearly one thousand, twenty-five inspectors of fisheries and special officers; 112 overseers with magisterial powers ex-officio and 460 guardians temporarily employed to assist in the protection of fisheries.

The officers in charge of our thirty-six fish culture establishments with their permanent assistants aggregate over 85 employees, not comprising many others required during the busy season.

The officers and crews of the protection fleet of cruisers aggregate 270 men. There are also about 45 persons employed as reporters for the intelligence bureau during the fishing season who are not otherwise connected with the government work.

A complete list of these different fishery officers forms appendix No. 16 of this report.

### CONCLUSION.

Substantial progress has marked the exploitation of the fisheries of Canada, and they continue to be a source of considerable gain to a hardy and industrious section of our population. It cannot, however, be denied that the protection and development of the great resources of the waters of the Dominion would be facilitated were the present divided authority and overlapping administration, federal and provincial, merged in one central system. The disadvantage to the fisheries arising, at pre-

sent, from such causes, is intensified by the division of international interests and administrative policies along the border waters of Canada. There are no uniform concurrent regulations of an international character, and an injurious rivalry in the capture of fish, and a prevalent feeling of dissatisfaction at existing lax, or unfair fishery regulations in the same waters, tend to demoralize the industry and endanger its future prosperity.

Were the fisheries of the Dominion administered under one authority, with one ample and effective staff of officials; still more, were a system of common fishery laws enforced on both sides of the international boundary the beneficial results to all concerned would be rapidly apparent.

It is satisfactory to note that, at an early date, an international commission will be at work, authorized by treaty between Britain and the United States, and for the first time, there appears hope of some uniformity in protective, regulative and preservative measures in the waters which Canada shares with the neighbouring republic. Finally, it is important in relation to the fisheries of this continent, that the great International Fisheries Congress will meet in Washington, D.C., in September of this year. This congress assembles triennially and has met in Paris, St. Petersburg and Vienna, with great advantage to the fisheries of Europe. Each country possessing fisheries of any importance usually sends its commissioner of fisheries or some fishery experts to the congress and fishery questions are discussed from a large national and international standpoint. The Dominion Commissioner of Fisheries (Professor Prince) who has been chosen a vice-president of the congress, will represent Canada, under authority of an order in council, and Britain, New Zealand, France, Germany, Russia, Holland, Spain, Italy, Austria, Norway, Sweden, Portugal, Roumania, Brazil, Mexico, Venezuela, as well as the various states of America will send representatives. Ontario. Nova Scotia and several Canadian provinces will, it is stated, send delegates. Such a congress of fishery authorities could not meet on this continent at a more opportune time when steps are imminent for the unification of international fishery laws and administration and a tendency arising to remove conflicting or overlapping methods in the various Canadian provinces and in relation to the federal authority.

I have the honour to be, sir,

Your obedient servant,

LT.-COL. F. GOURDEAU,

Deputy Minister of Marine and Fisheries.



# SPECIAL APPENDED REPORTS

BY

## PROFESSOR E. E. PRINCE

Dominion Commissioner of Fisheries

- 1. EGGS AND EARLY LIFE HISTORY OF THE COD, HADDOCK AND MACKEREL.
- 2. MIGRATIONS OF SEA FISH.

1907-8



#### CONTENTS.

I.—THE EGGS AND LIFE HISTORY OF THE COD, HADDOCK AND MACKEREL.

Prevailing ignorance respecting the life history of important commercial fishes—Digest of researches by Prof. McIntosh and Dr. Masterman—Prof. G. O. Sars' researches —The fishes named produce small floating eggs, minute young, which come inshore —Later stages prefer diverse habitats—Six stages in each species—Cods' eggs described—Number of eggs produced—Spawning areas—Warmer waters preferred -Embryonic development-Larval and post-larval features-40-day cod inshore-Small cod 2-6 inches long on rocky shores—Mature in third year—Haddock resembles cod in development—How they differ—Haddock 1-3 inches long in mid-water—Later remain in open sea—'Mark' on shoulders at 1½-inch stage— Near the bottom at 4 inches—Later habits of haddock—Mackerel produces floating eggs containing an oil-globule—Quantity of eggs smaller than in cod and haddock -Size reached by mackerel-Spawning in May and June-Schools decimated by purse-seines—Later the spent fish recover and are fat in the fall—Size of the egg -Appearance of fry-First drawing made in Ireland-Mr. Holt's detailed descriptions—Larval and post-larval stages—Schools inshore—Abundance of 'tinkers' in bays-Adult stages.

#### II.—THE MIGRATIONS OF SEA FISH.

Practical importance of fish migrations in the sea—Experiments planned at Marine Biological Station, St. Andrews—Bird migrations are analogous—Different types of migration—Transportation of floating eggs and fry in the sea—Later movements of young fish—Curious anomalies in marked fish—Individual wanderers— Johnstone's and Schmidt's experiments with plaice in Irish Sea and Iceland— Long distances exceptionally traversed—Inshore and off-shore migrations—Views of Professor McIntosh—Young cod larvæ carried to colder areas and remain there -Cod of 1½ inches descend to bottom-Cod under 2 feet wander little-Mature cod really local in habitat—Spencer Baird's and Nielsen's views—Mackerel form local varieties—Natural restoration after depletion is not rapid—Food attracts fish to localities—Physical conditions are influential—The Gurnard (Trigla) an exception—Anadromous fishes wander little from their rivers, shad, salmon—Migration of birds and fishes compared—Fishes influenced by currents—Dr. Bell Dawson on compensating circulation in Gulf of St. Lawrence—Seines take fish which refuse bait—Main fishery for cod, mackerel, &c., should be after spawning, when the fish have recovered—Fish hatcheries of small avail for sea fishes generally.



# I.—THE EGGS AND LIFE HISTORY OF THE COD, HADDOCK AND MACKEREL.

BY PROFESSOR EDWARD E. PRINCE, COMMISSIONER OF FISHERIES, OTTAWA.

Complaint has been made that published investigations on fish life and fish habits, for popular information have been too exclusively devoted to fresh water fish and to anadromous species. The salmon, trout, whitefish, black bass and pike-perch or dore have been fully treated in reports and papers for general readers. The cod, haddock and mackerel are three examples of fishes that are of the highest commercial importance and about them readily accessible publications are wanting. It must also be added that scientific and technical knowledge concerning the life history of fishes inhabiting the deep sea is less full and complete than is the case with river and lake fishes and species like the salmon that spend only a portion of their time in fresh A considerable mass of information exists respecting the cod, mackerel and haddock, but to learn about the spawning peculiarities, habits of the young, rate of growth, food at different stages and migrations, it is necessary to consult difficult technical treatises and to read scientific journals which are not readily accessible. One of the very few books for general readers published in London in 1897 is the beautifully illustrated work on British Marine Food-Fishes, by Professor W. C. McIntosh and Dr. A. T. Masterman.

Little was generally known about the eggs and life history, the growth and migrations of sea fishes used for food when I began their special study in 1885 at St. Andrews, Scotland, under the guidance of Professor McIntosh, though it was already known, and had been known to specialists for nearly twenty years that cod, haddock and mackerel were wholly unlike the sea herring, and fresh water fishes, both in regard to the nature of their spawn, the features of their breeding, growth and early migrations.

Professor G. O. Sars had begun investigations in the course of which he secured small floating eggs, like minute pellets of glass, but so light and buoyant that they floated near the surface of the sea. The waters surrounding the Lofoten Islands, the famous fishing grounds of the Norwegian cod-fishermen, were filled with these small, almost invisible, floating eggs. Later Dr. Sars discovered other eggs much resembling cod's eggs, which proved to be the very similar eggs of the haddock, and later he obtained the eggs of the mackerel, also floating, rather larger than cods' eggs, and exhibiting a new feature, viz.: a glistening oil-globule. Dr. A. W. Malm, of Göteburg, likewise found the eggs of the haddock and mackerel and described them, while Alexander Agassiz, and the early scientific staff of the United States' Fish Commission (Dr. J. A. Ryder, Dr. R. E. Earll and others) confirmed previous discoveries and extended them very considerably. So inadequately was the importance of Sars' amazing discoveries realized by biologists and by the general public that at the Great International Fisheries Exhibition in London, in 1883, his drawings and descriptions of these floating sea-fish eggs attracted little attention on the whole. On my many visits to that famous and in some respects unsurpassed fisheries exhibition, I never failed to re-examine Dr. Sars' drawings with the accompanying detailed descriptions placed alongside, and on no occasion did I observe brother scientists or interested spectators paying much attention to that unique exhibit. The specimens and drawings were not only unique, they were, from a fisheries point of view, epoch-making. In the official catalogue of the exhibition it is interesting to note that they were carefully described.

Owing to this special interest I quote from the catalogue the following notice: 'Professor G. O. Sars, development of cod (Gadus morrhua) explained by a series of fifty-six coloured drawings on seven plates, made by the exhibitor during his visits to the Lofoten Islands in the years 1865-69.' There were shown 56 accurately drawn figures, Nos. 1-24 showing the ovary, early ovum and first segmentation stages; Nos. 25-36, the formation of the young fish in the egg, and the features of the hatched larva and young cod up to one inch in length; Nos. 37-52, later stages of young post-larval cod, and Nos. 53 to 56, later codling up to adult cod, 20 and 33 inches in length.

The collection was not an imposing display and was overshadowed by the larger and more striking objects displayed in the various sections and galleries, and sent from all quarters of the globe. At the conferences, which were held frequently during the eight or nine months of the exhibition's existence, and which I attended diligently, in order to listen to the great masters in the science of fish and fisheries, very scant reference was made, so far as I can recall, to the astonishing and revolutionizing character of Dr. Sars' specimens, and their importance as practically bearing upon

the preservation and welfare of the fishing industries in the sea.

At the commencement of my researches I found that the field was regarded as virgin and practically untouched, so little was generally known about the eggs and the breeding peculiarities of the marine food fishes, which form the staple commodities in the great fish markets of the world. When Professor McIntosh and myself read at the British Association and at the Royal Society of Edinburgh the results of our investigations, they were regarded by the biologists as very novel and of altogether peculiar interest and importance. Full and adequate studies, in continuation of the pioneer work of Dr. G. O. Sars and Dr. A. W. Malm, had not been made of the lilfe histories of the marketable food fishes in the sea. Indeed, until I studied mackerel eggs in the spring of 1893 on the s.s. Fingal, and made drawings of the young fry immediately after hatching, no one had seen or sketched the mackerel in its first stages, and those published subsequently by a very able English authority showed colouration and other features not observed by me in the Irish mackerel eggs obtained during the official fishery cruise under H. M. Inspector W. Spotswood Green, in the year named.

The researches above referred to, with later investigations by other workers have shown that:

(1) Cod, haddock and mackerel produce spherical eggs which are typically pelagic, *i.e.*, small in size, extremely delicate in structure and appearance, of glassy transparency and so buoyant as to float freely near the surface of the sea.

(2) The young larvæ emerging from these eggs are as minute as mosquitos or midges, very buoyant and transparent, frequenting the superficial strata of the open sea, and carried helplessly about by the tides and currents, during the earliest part of their life.

(3) The young fishes, as soon as they cease to feed on their stock of food yolk, and actively capture food, migrate in schools incalculably vast, from the open waters, where they are first congregated and find safer areas inshore, often quite close to the shallow beach or the tidal rock-pools.

(4) The later post-larval and adolescent stages are marked in each species by features in their migrations and habits which are not uniform but diverse, and

distinctive of the several species.

In the following summarized account I shall describe in each of the four named species:

(1) The mature ovum and its deposition.

(2) The hatching of the ovum and larval migrations.

(3) The features characteristic of the early larval stages.

(4) The post-larval or pre-adolescent stages, often embracing curious developmental transformations.

(5) The maturer stages, not yet adult, and migrations.

(6) The adult condition and habitats in the sea.

The egg of the cod is a spherical buoyant pellet 1.38 to 1.39 mm., or a little over three-fifths of an inch in diameter, and of such colourless transparency as to be practically invisible in the water. On the Banks of Newfoundland and off the Canadian Labrador, as also off the Lofoten Islands and the southwest shores of Iceland, these floating eggs may occur in quantities beyond the grasp of the human mind. Their incalculably vast myriads dancing like microscopic soap-bubbles in the sea may indeed impart a dull milky aspect to the surface waters as though a filmy stratum of mueilage floated along the surface of the sea, as described by Norwegian fishermen over forty years ago.

Each female cod produces an enormous number of eggs. Indeed, M. Petit weighed the ovary of a specimen and calculated that at least nine millions of eggs were contained in a single large fish. The female cod is, contrary to the rule in most fishes, smaller than the male when full grown. The fish congregate near the surface of the sea at the spawning time, which is during the months of midwinter, October to December, or even so late as February and May. Off the coast of Labrador and around the Magdalen Islands the spawning schools crowd so thickly that a vessel may be impeded in her progress, striving to pass through them. No well defined areas in the sea can be distinguished as cod spawning grounds; but the regions in Canada and Northern Europe vary from two to two hundred miles from the shore. Much depends on the nature of the coast and the character of the currents and tides; but it has been determined that the parent cod have a preference for warmer rather than colder areas. though the young fry are found to flourish, some months after hatching, in water of extreme frigidity as off the north coast of Iceland. The eggs scatter widely and in areas of low specific gravity they may descend to a depth of many fathoms, though the most favourable areas are those in which they float within one or two fathoms of the surface, and in extreme calms may form a smooth film quite at the surface. All the eggs are not deposited at once, but those which lose the creamy white opacity of the maturing eggs and acquire a clear glassy transparency like translucent gum, glide to the posterior end of the ovary and are shed. While the ripe female cod scatter their eggs near the surface, the male fish congregate below, and the streams of minute sperms which they eject like jets of cream, ascend and fertilize the eggs. Few eggs probably escape fertilization, as the tests in the Marine Laboratory, now the Gatty Marine Station, at St. Andrews, Scotland, proved. Dr. Schmidt, in a recent report on the cod in Iceland states that 'when maturity approaches, and the fish is preparing for reproduction, it becomes much more sensitive to external conditions. This results in the undertaking of the second great migration of its life, which having regard to the object may be called the spawning migration, and which ends in the warm water on the south and west coasts. The proportion of the sexes on the spawning grounds has not been determined, as has been done in the case of the salmon and certain other fishes; but Sars noticed in Norwegian waters more female fish near the surface than male fish.

The eggs are helplessly wafted about in the water, and in a period varying from one week to four weeks, according to the temperature, the young fish, less than one-sixth of an inch long (4 mm. or ·16 in.) emerge into the open sea, floating back downwards and exhibiting four black transverse bands along the slender worm-like body. Within two or three days the young fish have vigour enough to swim in the right position, progressing by sharp wriggling motions. A swollen ball of yolk protrudes from the under side and upon that fluid yolk the fry feeds. By the end of the first week the yolk-sac has nearly disappeared and the fish is slightly longer and appears deeper in the body owing to a long fin along the back having grown in height. About this time (being now over 5 mm. in length, or ·195 in.) the eyes appear bright and silvery, a black patch appears at each side of the body and the two first cross bands of dark colour break up, but the second and third bands still remain, and the little fish descends to some depth to what is known as the mid-water habitat. Minute crablife copepods now form the main food of the larval cod and these, when undergoing

digestion, turn pinkish or red. Hence this red food visible through the transparent walls of the young fish impart to it a reddish hue. Later, when 5.6 mm. long (.226 in.) the last two bars have disintegrated, black spots appear on the head and along the middle of the under surface, while a greenish yellow tint faintly appears over the little fish. All this time the breast fins have been actively used like delicate fans, but the second pair or ventral fins now bud out, yellowish tints appear, and a length of .332 in. or 8.25 mm. is attained at this time, viz., the third week. A little later, when the cod is .375 in. or 9.42 mm., hard rays appear and strengthen the back fin, the anal fin and the tail fin, and the shape of the head is no longer blunt and rounded, but more pointed and cod-like. The mouth opens to the front instead of upwards, as in the earlier stages, and a little barbule or feeler appears at the tip of the chin. Myriads of these baby cod now move shorewards, and a month or five weeks later, in May, June and July, when the fish are over 40 days old (.585 in. or 14.8 mm. long) they crowd the inshore waters. They rapidly reach a length of an inch, and in company with green cod, pollock, &c., form schools in the rock pools and in shallow inlets. The cod is distinguishable by the more marked reddish hue of the top of the head, by the pearly lustre of the sides variegated with eight or nine irregular dark blotches along the sides and back, while the belly is silvery. Black spots appear on the two back fins and on the first anal fin below, but none on the tail fin, though a U-shaped band occurs marking the root of the tail.

Dr. Schmidt found that small cod in the North Sea, off the Scottish coast, were much paler in colour than the larval cod of more northern waters. Sars was the first to describe the cod at 2 inches (50.8 mm.) in early August amongst algæ along rocky shores, and states that by October they are 4 or 5 in. long, and a month later as much as 6 to 10 inches long. Their colour varied, being reddish yellow on rocky shores and greener or grey on sandy spots. When a year old, say in February or March, the young codling may be a foot in length (304.8 mm.) and in the course of the season they forsake the shore and migrate seaward. In their third or fourth year the cod is mature

and they are then two feet or more in length and develop spawn.

#### HADDOCK.

In many respects the haddock resembles its congener the cod, yet, a careful study of their eggs, life history, habits and external features shows innumerable differences and even contrasts. Their localities for spawning are much the same as those of the cod, being out in the open sea from five to twenty, or even sixty, miles from land. The female haddock is universally smaller than the male, and the size of the egg is really the largest of the early pelagic or floating eggs. It is not readily distinguished from the spherical, transparent, buoyant eggs of the cod, but is larger, viz., .058 in. in diameter, or 1 458 mm., and the number produced is far less than in the case of the cod viz: a quarter of a million to two million eggs. Haddock scatter their ova in the sea from January to the end of May, and the time of hatching varies from one to three weeks. The newly hatched fry are smaller than those of the cod, viz., ·14 in., or 3·5 to 4 mm., and they swim helplessly, ventral side upwards, being incommoded by the yolk sac or ball of fluid food which nourishes them for several days. There is no trace of the cross-bars so prominent in the cod, but irregular black spots occur about the shoulder, and a row on each side from the abdominal area to the tail and along the ventral line of the muscular body. After floating about for a week near the surface of the sea they appear to make for deeper water near the bottom and red-blood has been observed at that age. It is interesting to note that in these minute floating larval fish there is no red blood for some time, a delicate colourless fluid being driven by the heart over the transparent body. The jaw is turned sharply upward until the eleventh or twelfth day, when the movable lower jaw opens direct to the front. The lateral abdominal patch of colour is even more marked and dense and along the lower border of the fleshy tail a row of black stars is a marked feature. In May the young haddock from 1 inch

to 3 inches in length abound in mid-water, neither at the bottom nor near the surface of the sea. They remain 20 to 40 miles out at sea, and do not migrate close inshore like the cod and the pollock and green cod. Sars described the haddock as stouter and more compact in form than the cod of the same age. The ventral pair of fins are first noticed in the fish at an inch in length, when the sides of the body are sparsely spotted with black dots, the head and shoulders included, and the specks of black colour extend over the fins; but the under surface of the fish is pale and silvery. When about onefifth longer, i.e., 11/4 inch long (29 mm.) the larval haddock still keeps to deep water, and the two ventral fins appear exceptionally long, while the unpaired dorsal and anal fins are largely developed, but there is still no regular cross-bar or checker pattern similar to that of the cod. On reaching a length of 1½ inches (39 mm.) minute scales appear, and the characteristic 'thumb' mark or black patch behind the shoulder is quite distinctly visible. The barbule on the tip of the chin appears, but is shorter than in the case of the cod, and the mouth is smaller in proportion to the size of the fish. There is no dappled appearance as in the cod, and no dusky or speckled coloration as in the green cod or pollock. When an inch longer (2% inch, i.e., 60.45 mm.) the haddock 'mark' is darker and more definite, the pectoral fins are vellowish brown and speckled, uniform specks of black extend all over the head and body, the eyes are of a metallic silvery colour and the lower jaw and the mental barbel are smaller than in the cod. In contrast to the cod, no haddock appear to frequent the shore up to this age. Specimens 80 mm., i.e., 31 inches long, exhibit a warm coppery sheen such as is so frequently observed in the large full grown haddock. Professor McIntosh in his account of the haddock, states that the bottom trawl at the end of July has secured haddock of 4 inches (101.1 mm.), and they are taken also on baited hooks, but before that stage none have been secured otherwise than in the mid-water net or in the stomachs of predaceous fishes. At that size they are no doubt about five months old. Later specimens six or seven months old, 6 inches long, have been secured, and in November and December they measure over 7 inches in length, while the following May and June they reach a length of at least nine inches and cannot be less than thirteen to nineteen months old. Thus the haddock shows rapid growth during its first summer, no less than an inch per month; but in winter its growth is slower. In the third year the haddock reaches the mature stage and is developing spawn. After spawning they are often found inshore feeding voraciously on eggs of other fishes attached to rocks, &c., and they are much more gregarious in their habits than cod, but are not abundant so far north as the related species named.

#### MACKEREL.

Widely differing from the cod and haddock in all the features which are regarded as important in the eyes of the naturalist, the mackerel ranks with the two valuable food-fish named on account of its importance economically, and on account of its production of minute delicate floating eggs. The salmons' eggs are large and heavy, and the eggs of the herring are dense and cling together like hard glassy pellets; but the eggs of the mackerel are extremely transparent and delicate and float buoyantly near the sea's surface. Professor G. O. Sars and Dr. A. W. Malm first described the egg, and it was my good fortune, as already stated, to be the first naturalist to hatch out and make scientific drawings of the young larval mackerel, when with Mr. Spotswood Green, investigating the west Irish fishing grounds on the ss. Fingal. female mackerel produces on an average probably a quarter of a million eggs. Drs. Jordan and Evermann say: 'The mackerel egg is exceedingly small, it being only 1/24 of an inch in diameter. The eggs average about 40,000 to the fish, but 200,000 have been taken from one fish. The largest mackerel would doubtless produce 1,000,000 eggs each.' Yarrel regards fish 14 to 16 inches long as large average specimens, such weighing about 2 pounds; but he states that in 1849 a specimen 18 inches long and weighing 2½ pounds was caught on the English coast, and in November, 1856, one was

sold in London weighing 2 pounds 10 ounces; but in Canadian waters much larger mackerel are frequent, and I myself saw a Nova Scotia mackerel taken in May, 1898, which was 22½ inches long and weighed no less than 4½ pounds. In May and June the spawning schools move landward to spawn. They approach the Nova Scotian coast and move into the Gulf of St. Lawrence from a southeasterly direction. Up to the middle of July they will not, as a rule take bait, and as Professor Hind pointed out they lose all desire for bait when engaged in spawning. The deadly purse-seine introduced into the Gulf of St. Lawrence by the American schooners captures these spawning schools in immense quantities. Almost without exception these fish coming into Pleasant Bay early in July and going up the north shore (Quebec) as far as Pointe de Monts about the end of July, are spawning or partly spawned. June and July cover the period, though mackerel remain and feed in the Gulf and along the Canadian shores until the end of October. The spawning and spawned fish are very inferior, but the fall mackerel, having recovered and fed up, are firm and fat and

incomparably superior in every respect.

The eggs produced by the mackerel are small translucent spheres over 1/25th of an inch in diameter (.038 in. or 1.22 mm.), and exhibit in the midst of the clear contents a cloudy, almost colourless globule 1/80th of an inch in diameter (.32 or .33 mm.). No globule appears in the eggs of the cod or haddock, but the ling, the gurnard and other fishes exhibit in the egg a so-called oil globule. In about six days the young fish hatches out and at first, a few sparse specks of yellowish colour are seen near the eyes. The yellow specks later appear mingled with black dots on the globule and over the head and body, and form an irregular line along the back. These spots, says the well known Irish fishery authority, Mr. E. W. L. Holt, are blue black, not dead black. The young mackerel which I had under observation for over a week until accidentally killed by a cloud of hot soot showered upon them from the smoke stack of the steamer, showed no other colours excepting yellow and black, but it has been stated that bright green pigment occurs on the fifth day on the tail, and behind the eyes and on the globule. On the ninth day after hatching a length of ·19 in. or 4·88 mm. is reached and the ball of food yolk is used up. The eyes have a bright blue metallic appearance, and on the sides, the upper abdominal pigment is very marked, but there are few spots on other parts, and no cross bands or serial patches. By the tenth or eleventh day the larval appearance is gone and the post-larval stage is fully attained. Mr. Holt compares the mackerel larva at this stage to the grotesque post-larval Cottus or seaskulpin. At this time the schools of young come inshore and vast numbers may be seen in Northumberland Straits, off Prince Edward Island, and in the Bay of Chalcur off the Bonaventure coast in August and September. Dunn, the well known English observer, speaks of young mackerel 3 inches long in bays and shallow inlets. In November, when 6 or 7 inches long, they move into deeper water, and are not observed until they reappear as 'tinker' mackerel, 8 or 9 inches long, abounding in harbours and bays. Sars held the opinion that a one-year old mackerel was as long as the finger, that at the end of the second year it was the size of a herring, and that in the third year it is full grown, though many authorities give the mackerel another year and declare a mature spawning mackerel to be in its fourth year. For the first two years the young mackerel frequent open water near shore, and as Professor McIntosh, of St. Andrews, Scotland, says, the lengths 4 inches, 8 inches and 11 inches probably correspond with successive years in the life of the mackerel.

While the mackerel schools along the various portions of the lengthy Atlantic coast of Canada have not been separated into local races or such differences noted as in European seas, yet there is no doubt that each area on the coast has its own stock and that the mackerel does not migrate over long distances, but largely confines its movements to coming into shallow waters from deeper water and vice versa.

#### II.—THE MIGRATIONS OF SEA FISH, WITH SOME RESULTS OF MARK-ING FISH.

BY PROFESSOR EDWARD E. PRINCE, DOMINION COMMISSIONER OF FISHERIES, OTTAWA.

The migrations of sea fish are of importance in connection with the commercial utilization of marine fishery resources. Their determination is beset by peculiar difficulties, and the systematic marking of considerable numbers of the most valued food fishes on the plan adopted by the Marine Biological Board of Canada, to be carried out in successive seasons on the Atlantic coast of the Dominion with the Marine Laboratory at St. Andrews, N.B., as the principal station, is the first step towards deciding the seasonal movements of the schools of fish upon which Canadian fishermen depend for their catches. Just as the study of bird migrations occupied ornithologists for over a hundred years, and the accumulation of observations and the tabulation of ascertained facts has resulted in some approach to a satisfactory understanding of the remarkable movements of the feathered tribes over the surface of the earth, though much remains still to be discovered, so the thorough understanding of the wanderings of the finny tribes taking place in an element which hides them more securely from continuous observation than the heights of the atmosphere hide the feathered tribes, is a subject that only the patient collection of facts, and their ascertainment both by ordinary practical as well as by scientific experimental methods can enable us to arrive at complete and adequate results. The movements of fishes in the sea vary according to the period of life of each species. Nay, even the eggs, before giving birth to the young fish, are the subject of migratory movements and add to the complexity of the subject in many species. Shore fish, which produce floating eggs, like the cod, haddock, mackerel and many flat fishes, are distributed over wide areas before they hatch out. The young fish, after hatching, are under the influence of tides and currents which effect migratory movements and transport them over great extents of sea. Later, the effects of temperature, salinity, movements of the air (winds) and of the water, are felt by the schools of small post-larval fishes, and later still the occurrence of food is a most potent factor in leading fish to take long journeys, while at maturity, besides the quest for food, the spawning instinct is powerful in causing them to move from one area to another.

The methods of marking fish are important, but owing to the variety of devices adopted by different observers in Europe and on this continent I shall deal with the subject of modes of marking fish in a special paper in the journal of the Biological Stations of Canada, Part III. of which appears at an early date. The mode of marking is one of more serious moment in the work of deciding the migrations of fishes than may, at first sight, appear. Observers have found, for example, that while a large number of fish have been found to move over a limited area in some definite direction, single individuals or three or four individuals have taken to roaming, and in a short time have migrated to very long distances in the most diverses directions.\* Thus in Mr. James Johnstone's experiments in the Irish sea, with the valuable flat fish the plaice (Platessa), out of 35 fishes marked and liberated on the Lancashire coast, about 40 miles northwest of Liverpool, one wandered past the Isle of Man round the Mull of Galloway to Corsewall Point, near the southwest corner of Ayrshire, a distance of 110

<sup>\*</sup>The irritation caused by the tag may in some cases keep the fish continually on the move, just as the migrating herds of Barren Ground caribou, annoyed by the constant attacks of large deer flies in summer, never cease to move onward over long distances †See my special Report, 1907, p. lxi.

miles, while another was recaptured near Dundalk, in Ireland, having traversed a distance of more than 120 miles, the former occupying over 14 months in the journey, while the latter took between nine and ten months to cross the Irish sea, whereas most of them were recaptured within a few months at distances of eight to twenty or thirty miles from the spot where they were marked and placed in the sea. Similar peculiar wanderings have been noticed in the United States' experiments with lobsters, rare examples wandering upwards of a hunudred miles from thee locality of liberation. † Dr. Johs. Schmidt, in his experiments with Icelandic plaice, found that most of them in 10 or 11 months (July, 1905, to May and June, 1906), moved 200 miles; one plaice reached a point about 280 miles, one about 250 miles and two about 220 miles from Vopnafjordhr, where they had been placed in the water, the one travelling the longest distance (from July to January following) in six months time. There is, however, an inshore and offshore movement, apart from definite lengthy linear migrations, mainly connected with spawning. Thus small flat fishes which very early in the year frequent the shallow inshore grounds move with the approach of summer and, as they grow larger, move into deeper water. Most fish in their early life after their larval life is over and they have assumed the form of the adult, though their dimensions are small, exhibit this habit of leaving the shallows. This movement is no doubt connected with a change in feeding habits as well as with a view to greater security and protection from enemies. In all experiments with marked fish there is a preponderance observed in the fish taking some definite direction. Johnstone's experiments showed, in the North Wales plaice, a movement westward along the northeast shore of Anglesey, a migration similar to that observed at two stations further north, viz.: off the Ribble Estuary and off Lancaster Bay, where the migration west and southwest was marked. Professor McIntosh was the first observer to indicate the main facts, viz.: the migration of the floating eggs inwards, the hatching of the young and their distribution over the inshore shallows, after drifting it may be for over a month in the same direction as the eggs, and then after reaching maturity, moving into deeper water. In the deeper waters the plaice move as in the Irish sea, or off the Scottish shores, westerly; but must, of course, vary on other shores with the geographical contour of the different localities. Indeed, as Schmidt shows, adult plaice liberated on the north coast of Iceland moved westward more than a hundred miles, while other batches of adult plaice, deposited on the east coast of Iceland, all migrated southwards. The authority named decided that the reason of this definite migration was to reach areas of warmer water 'with the exception of the few retaken close to where they were liberated, none of the plaice were retaken on the east coast. It is only right down in the south . . . . that the most were retaken.' Moreover the plaice from the north moved much slower than those from the eastern station, due, it may be, to the rougher and more irregular nature of the shore and the bottom. A similar west and south movement of the cod was also observed by the Danish authority referred to. By this movement of the adult cod warmer areas are reached suitable for the hatching of the floating eggs. But after hatching the small cod, not more than 1/5th or 1/6th of an inch in length, are borne by currents north and east so that these cold northern areas are crowded with cod fry and pass their first winter in those frigid surroundings. Schmidt found as early as April (in 1904) vast swarms of young cod 'whilst the south and southwest coasts of Iceland are washed throughout the whole year by warm Atlantic water, this is not the case on the east and north coasts, where the influence of the polar water is felt.' Few cod fry are found in the warmer south and southwest waters where the spawning takes place, but they abound in the cold northern areas where the temperature rarely rises for most of the year above freezing point. There they remain until a year old or even two years old. Young cod when 11 or 11 inches long are no longer found swimming at the surface, but seek the bottom, and when from 12 inches to 2 inches in length crowd inshore and abound in rock pools, and when 8 or 9 months old (6 to 10 inches long), move out again to greater depths. When about a year old they are a foot long, and do not migrate until they are mature and ready to breed, usually when nearly

2 feet in length. Up to that time they are stationary and only migrate to warmer areas in the coally part of the p

in the early part of the year, January to April, for spawning purposes.

The recent experiments of the Marine Biological Association, England, shows that in the cod marked on the steamer *Huxley* most of them appeared not to have wandered far, these being below 2 feet in length. As the brief note in the recent journal of the association states:—

'The report is based on the 252 cod marked on the *Huxley* and the 42 recaptures recorded up to the date of writing. Most of the recaptures, constituting 13 per cent of the healthy fish liberated, took place within six months of liberation.

'The fish below 60 cm. (24 in.) in length remained in water of depth similar to that in which they were first caught, and had not travelled far. Most of those which had moved some distance from the liberation point were recaptured south or west of it.'

Now in the Atlantic waters of Canada the cod taken in June and July and on to September or later are the cod which have spawned in deep water and resort to shallow inshore waters for food or find it on the rough and rich ground known as the The fishermen speak of the cod moving north after the capelin and the swarming of immense schools of large cod on the Labrador shores is due to the presence of the smelt-like capelin upon which they feed and grow fat. These coast migrations during the summer months are limited and, we may almost say, with the late Professor Hind, that the 'schools of cod frequenting a particular coast may be said to be indigenous to it.' The late Professor Spencer Baird came to the same conclusion: 'The cod' he says (U. S. Comm. Rep., 1889) 'is a local fish, and the different schools have their different habitats.' Nielsen, in his report (Rep. Newfoundland Fish Comm., 1889), expresses the opinion that the cod is a local fish as well as the salmon, and indicates with some detail that each group has its local resort and the local varieties can be readily distinguished, a George's Bank fish being known from any other kind of cod on the other 'banks.' So can a Cape St. Mary's fish be distinguished from any other kind of cod in Newfoundland, and a Trinity Bay fish from a Placentia fish.' The view has even been expressed that in the sea, as in salmon and shad rivers, each area or locality has its own local variety of the same species, and Professor Baird went so far as to assert that deep sea fisheries depleted in any particular locality will not be restored. 'No fish' he ventured to declare 'will come from surrounding localities to take the vacant place. Fish bear a particular relation to particular spots and fishing out one locality is thus like emptying a keg of lard, the space left does not become again occupied.' Valid objection may be justifiably raised to a view so extreme as that, but it is nevertheless true that in different localities the same species of fish may exhibit distinctive features, and demonstrate the existence of local races. Even so migratory a fish as the mackerel, if we accept Professor Garstang's views, shows marked local variations, so that different areas may be said to be peopled by different local

The floating eggs of most sea fishes of value for food purposes may be carried over great distances as already pointed out, and the young larval and post-larval stages are similarly transported from one area to another so that local varieties must cross each others' boundaries and interdigate or intermingle, nevertheless the fact is that in some localities valuable fish have been so persistently destroyed that their almost total depletion has been accomplished and their former abundance, even after many years, has never been restored. The cod fisheries on many parts of the Atlantic coast of Canada have been destroyed, and the mackerel, once abounding all along the eastern shores of the Dominion, have become largely a thing of the past, while the once marvellous shad fisheries of the Bay of Fundy are not one-thousandth the value and extent they were 30 or 40 years ago. The disappearance of fish may be the result of many and various causes, but the restoration by incoming schools from other non-depleted areas is either very slow, or does not take place to any appreciable degree. Fish may migrate from an accustomed locality to another new locality, attracted there by more abundant food, and the disappearance of fish and decay of important fisheries

may often be traced to that cause. It has even been claimed that the decline 18 or 20 years ago of the Gulf of St. Lawrence mackerel fisheries is due not merely to the wholesale destruction of the schools of fish just before spawning, but to the increasing scarcity of the food which brought them into the inshore waters. Lobsters were formerly incredibly abundant and each summer the inshore waters were alive with incredibly vast numbers of the surface swimming fry of the valuable crustacean. These crowded young lobster fry were the chief food of the mackerel, and with the destruction of the lobsters and consequent scarcity of the free swimming young, the mackerel found their food gone and they sought food elsewhere. This may be true in a certain degree, and the sudden and unexpected appearance of large schools of mackerel last season supports it. The balance of nature once seriously disturbed has wide and lasting effects. But the physical conditions in the sea may change, currents and particular seasonal streams may so vary as to affect the salinity and temperature of the water. Temperature is a potent factor in determining the movements of fish.\* Thus, as Dr. Wemyss Fulton, ten or eleven years ago announced, the gurnard (Trigla), an esteemed food fish in Britain, moves inshore from deeper water about the end of March and in April and especially in May. Most of them are breeding fish and they spawn from April until July or August, thus seeking the warmer inshore waters at the spawning time. Temperature brings in these adult fish, but large numbers of small immature gurnards also move inshore from May onwards. With them it cannot be the spawning instinct, but must be due to the increasing temperature and possibly also to a greater plenitude of food. The gurnard thus presents a feature quite the reverse of that of the cod, in the young stages, for the small gurnards appear to be most sensitive to a higher temperature and forsake the deeper, colder water; whereas the cod, in its young stages, spends its first year at least in the most frigid surroundings in the waters of northern Iceland. While cod, haddock, plaice, &c., seek the deeper waters and spawn offshore, the gurnard moves closer into shallower water to commence spawning in April and May. But anadromous fishes, which annually ascend rivers, like the smelt, striped bass, shad, alewife or gaspereau and salmon, are not content to move into shallow inshore areas of the sea, they pass up into the brackish waters of rivers, like the smelt, or ascend, like the striped bass, to tidal limits, or move further up entirely above the influence of the tide, like the shad and gaspereau, or like the salmon migrate hundreds or even thousands of miles to the head-waters of the noblest and longest continental rivers. 'Leaving their home in the far deep, the shad, in beginning their annual pilgrimage,' says a popular writer on the migration of the shad, 'rise to the surface, and then direct their course landward, the earliest emigrants being those in which the propagative function is most advanced. Pursuing their way over the comparative shallows that widely fringe our continent, and joined by other communities bent upon the same devoted errand, they gather in our estuaries and about the mouths of our rivers, and there they linger until the effluent waters are warmer than those of the sea.' The opinion prevails that the schools of shad resorting to a certain river are the fish originally hatched in that river, and attracted by some peculiarity in the water flowing out of the mouth of their native stream, and influenced by the degree of temperature favourable for their entrance into fresh water, return once more to the upper waters. Thus in the Bay of Fundy the spawning fish in the St. John river are not the schools native to the Annapolis or the Avon of Minas Basin, nor are any of these fish which were hatched from eggs deposited by parent fish in the Stewiacke, Shubenacadie or the Petitcodiac rivers. When shad were taken from the Atlantic to the Pacific by the United States Fisheries Bureau, certainty was felt that the shad planted in the Sacramento would return to that river only. As the writer already quoted says:—

<sup>\*</sup>Thus on the north shore of the Gulf and Labrador it was reported in 1867 that there were 'no cod to be caught for there was no bait' that is the herring and caplin did not come inshore as usual; whereas in 1884 the small catches of cod were attributed to the severity of the season the ice remaining until nearly the end of May. The cod fishery was a failure.

'Until the Pacific coast plantings it was assumed that the shad invariably returned to the stream that gave them birth, and this, as a rule, is perhaps correct. The conditions of the California coast evidently operate, however, to the diffusion of the fish, they having in many instances established themselves in rivers far from the Sacramento. This movement may be due to the balmy Japanese current, the Gulf Stream of the Pacific, which laves its northeastern shore and agreeably tempers its climate. Influenced by its genial flow and pursuing its track, the shad have wandered northward, and, if they maintain their advance, as they probably will, their ultimate establishment in the river system of Asia may be regarded as assured. Owing to various favourable conditions, the shad not only multiplies rapidly in its new abode, but in some localities has modified its habits, being found in varying abundance throughout the year. Moreover, it attains an exceptional size; seven and eight pound fish are common in California, but are almost unknown with us, and there have been exposed for sale in the San Francisco market shad of a weight as high as twelve and thirteen pounds. This superiority in size is not unlikely due mainly to a less actively prosecuted fishery, for shad of equal weight were known to our fathers. The heaviest fish are probably the growth of a number of years, and an exhaustive fishery that each season leaves but few survivors necessarily tends to eliminate the larger individuals.

It is reported that some of the shad resulting from the stock originally placed in the Sacramento have been captured in Alaska, and certainly in the Fraser river, Rivers inlet and even the Skeena river, in British Columbia quite a number of shad have been taken by the salmon fishermen, several hundreds in all. How does this affect the prevalent theory that such fish are true to their own native river? There is abundant evidence that salmon return to their own rivers. This is seen in the differences almost sufficient to justify the establishment of sub-species, difference not only of external form, and of internal characteristics of the flesh (texture, colour, &c.), but of anatomical and skeletal features. A Godbout salmon of the north shore is distinguishable at once from the typical Restigouche salmon, while neither resemble in size and conformation the salmon of the Miramichi. The Peticodiac salmon are different from the St. John River fish, so that one may say of the Canadian salmon rivers of the Atlantic shore that a different variety of Salmo salar is characteristic of each of these rivers. Certainly, as Professor Starr Jordan has said, nearly all salmon return, as a general proposition to the region in which they were spawned, but that famous authority qualifies the opinion by indicating that the schools may also resort to other rivers to which they were not native, and adheres to his original view expressed in 1880. He says: 'It is the prevailing impression that the salmon have some special instinct which leads them to return to spawn in the same spawning grounds where they were originally hatched. We fail to find any evidence of this in the case of the Pacific coast salmon, and we do not believe it to be true. It seems more probable that the young salmon hatched in any river mostly remain in the ocean within a radius of twenty, thirty or forty miles of its mouth. These, in their movement about in the ocean may come into contact with the cold waters of their parent rivers, or perhaps of any other river, at a considerable distance from the shore. In the case of the quinnat and the blueback, their 'instinct' seems to lead them to ascend these fresh waters, and in a majority of cases these waters will be those in which the fishes in question were originally spawned. Later in the season the growth of the reproductive organs leads them to approach the shore and search for fresh waters, and still the chances are that they may find the original stream. But undoubtedly many fall salmon ascend, or try to ascend, streams in which no salmon was ever hatched. In little brooks about Puget Sound, where the water is not three inches deep, are often found dead or dying salmon, which have entered them for the purpose of spawning. It is said of the Russian river and other California rivers, that their mouths, in the time of low water in summer, generally become entirely closed by sand-bars, and that the salmon, in their eagerness to ascend them, frequently fling themselves entirely out of water on the beach.'

The conclusion is then stated that it is rather a search for fresh water simply rather than a desire to reach their native head-waters which impels the salmon to act in the way stated. Of course, there is the analogy of the migration of other animals, notably birds, in respect to which the late Professor Alfred Newton, of Cambridge, England, did not hesitate to speak of the 'pertinacity with which birds return to their accustomed breeding places and the force of this passionate fondness for the old home,' (Dict. of Birds, p. 556). No doubt the parents are in most cases the birds which return, otherwise it is difficult to understand the case of a pair of stone-curlews (Edicnemus) which bred for many years on the same spot, as Newton stated, even after the surroundings had been completely changed, an original barren rabbit warren having become a thick and flourishing bush or plantation. That it is the same pair of birds which return in such cases is difficult to prove, but as Newton pointed out, the alternative raises much greater difficulty 'for then we have to account for some mode of communicating precise information by one bird to another.' But the young as well as the parents are prone to return to the original haunts, as it has long been known that birds of prey drive away their offspring from their own haunts. 'The practice, however,' said Newton, 'is not limited to birds of prey alone, but is much more universal (op. cit. p. 554). There is much ground for believing that one of the main causes of migration in fishes is due to an hereditary tendency, an 'instinct' it may be called, for want of a better term, which is so strong, that even temperature of the surrounding water is less potent as a stimulus, and apart from the question of food and of breeding, this tendency to move over geographical areas with unerring certainty as to time and direction is one of the most perplexing and powerful that the scientific student can contemplate. It is true that, as Professor Hind stated, 'the question of inshore and offshore mackerel fishing grounds becomes, in a great measure, reduced in the Gulf of St. Lawrence, to the different conditions of marine climate which prevail where the Labrador current is the controlling agent, or where the Gulf stream asserts its power and influence during the summer season, but an inherent tendency exists also,

Dr. W. Bell Dawson has for successive seasons covering a number of years carried on elaborate and accurate investigations in the Gulf of St. Lawrence, and though it is early yet to attempt any generalizations between the results of these current and tide observations, and the movements of the great schools of fish in the Gulf, such as cod, haddock and mackerel. The general result, however, is to show that the outflow from the Gulf is compensated by an inflow both in the Straits of Belle Isle and Cabot straits and that the changes effected by this compensating circulation are what may be called superficial rather than deep-water. At greater depths than 50 or 60 fathoms these important currents have probably little or no effect. As Dr. Dawson has reported: 'In reviewing the movements of the water, with a view to tracing the general circulation of the Gulf, it is the principle of the balance of flow which is the most evident. Wherever a current of a constant character occurs, there is a corresponding return current to make up for it. Thus in Cabot strait, the outflowing water in the Cape Breton current is balanced by the inflow at Cape Ray; the northeastward current on the west coast of Newfoundland is balanced by the contrary direction of the movement on the opposite shore; and we have fairly good indications of a return flow to compensate for the Gaspé current.

'It is this balance of flow which points to the nature and direction of the circulation of water in the Gulf. If we begin to trace it from Cabot strait, where the balance between the gulf and the ocean takes place, the inflow at Cape Ray appears to diffuse itself more or less widely over the central part of the gulf, but it regains its strength further north on the west coast of Newfoundland, and makes a deep bend into the northeastern angle of the gulf, and returns westward along the north shore. On reaching Cape Whittle, it still makes westward; and, whether as an actual set, or by displacing water which comes more directly from Cape Ray, it appears to work around the eastern end of Anticosti, and so compensates for the outflow of the Gaspé current from the estuary of the St. Lawrence. This current after rounding the Gaspé coast.

makes southeastward as a general set or drift across the gulf to the western side of Cabot strait; and its waters there leave the gulf in the outflow of the Cape Breton current.

'It also appears that the whole of the balance or compensation in the gulf currents takes place at the surface and in ordinary under-currents, which do not probably extend to a greater depth than some 50 or 60 fathoms. There is nothing, therefore, to show the necessity for any appreciable movement in the deep water from 60 to 80 fathoms downward, which lies in the deep channels of the gulf. Where direct observations have been obtained, this deep water appears to lie quiescent, without any movement that can be detected.'

But to the ordinary mind the outflow of such a vast river as the St. Lawrence, the largest river in North America, must appear to profoundly affect the gulf waters, both as to salinity, temperature, &c.; but Dr. Dawson has pointed out that the 'volume discharged by the St. Lawrence has been measured above Lake St. Peter at different seasons; and with the addition of the Richelieu, St. Maurice, Saguenay, and other tributaries along its estuary, the total volume of fresh water discharge would probably amount in all to 340,000 cubic feet per second. This volume of fresh water will mingle with sea water for which we may assume a density of 1.0240; as this may be taken to represent either the mean density of Atlantic coast water to a moderate depth, or the density of the salter water in the gulf itself. Under these conditions, the fresh water of the St. Lawrence would be sufficient to furnish a stream of water reduced to the lower density of 1.0230 which would be twelve miles wide and 68 feet deep, and moving with a speed of one knot per hour. This would represent the average density of the Gaspé current, and would probably be an approximation to its average speed and its volume;' but the outflow known as the Gaspé current is immensely greater than the volume of the St. Lawrence river outflow. As Dr. Dawson has estimated 'such a current has a volume forty-three times greater than the St. Lawrence river. The volume of the Cape Breton current also, is probably much the same. These outflows must therefore be replaced by a return movement at the entrance to the lower St. Lawrence; somewhere in the Anticosti region, and also by a return flow from the ocean into the gulf area; as the discharge of the St. Lawrence furnishes less than 3 per cent of the amount required in either case.'

The north shore current as well as the current flowing direct from Cabot strait must be taken into account in explanation of this vast volume of outflow. Dr. Dawson, indeed has pointed out that while 'the volume of fresh water from the St. Lawrence, as already explained, may be sufficient to dilute the sea water to the low density found in the Gaspé current or in the corresponding current flowing outward through Cabot strait, the total volume of water which actually leaves the gulf is vastly greater than the volume of fresh water which it receives from the St. Lawrence river. The volume so leaving the gulf must, therefore, be replaced by water which enters it from the ocean.

'The current which usually makes inwards on the east side of Cabot strait, may be sufficient to compensate for the outflowing water of the Cape Breton current; although it is also possible that the outflow from the gulf may be partly made up for, by the difference of flow in the inward direction through Belle Isle strait; which in some years may be considerable in the early spring. The relation of the current in this strait to the gulf as a whole, has already been explained; as well as the probable amount of inflow at Cape Ray, in continuation of the general westward tendency of the water along the south coast of Newfoundland. The quiescence of the deep water in Cabot strait has also been pointed out, in this connection.' The general result of these counter currents, as affecting the distribution of floating ova and young of cod, haddock and mackerel, would appear to be that the spawn is kept inside the gulf limits and not swept out into the open ocean, while the young fish are probably carried in circular courses in local areas, never very distant from the hatching areas.

I have the materials well advanced for a report on the results of this system of currents on the distribution of floating ova which vast schools of cod and

8-9 EDWARD VII., A. 1909

mackerel deposit in the surface waters. The movements of the early fry must of necessity be more complex and vastly less easy to ascertain than is the case on the north and west shores of Iceland or the corresponding Norse shores in both of which regions elaborate scientific results have been published.

It is well known that spawning fish refuse to readily take bait and the early schools of cod captured in June have already spawned, some of them probably a month or six weeks earlier, while the fall cod, especially the deep water fish, are undoubtedly the fish that have left the shallower waters and the surface waters to feed on the rich fauna on the floor of the sea. Nor is it very different with the mackerel which early in June are distended with ripe spawn, and refusing to take bait, as all spawning fish do, were mercilessly slaughtered by purse-seines, &c. By the end of July spawning is over, and the fish commence to feed up from that period, though their condition is not favourable for a month or more, or not until the first ten or twelve days of August. Such being the facts regarding the gulf mackerel and cod it is easy to see that both these fisheries can be restored where decayed, or preserved permanently when the abundance of fish has been maintained by as far as possible securing that the main fishery shall be after the spawning is over, and if possible after the fish have been feeding for three or four weeks and have recovered their condition. Inshore fishing for cod very early in the season is not to be encouraged, and early destruction of the spawning schools of mackerel is likewise unjustifiable. The millions of spawn produced by one female cod or mackerel indicates how easy restoration is, if only a sufficient number of spawners be allowed undisturbed to perform their spawning functions. The eggs and young are of course destroyed in quantity by their natural enemies, and these are, therefore produced on a large scale, but the balance of nature is such that if not too seriously disturbed by such exterminating instruments as the exhausting purseseine, scooping in complete schools of spawning fish, there is no fear for the continued abundance of such marine fish. The aid of fish culture and the operation of marine fish hatcheries being too problematical and uncertain to solve the difficulty, the protection of the breeding schools when they migrate and reach their spawning areas is the only sure and safe step on which reliance can be placed.

## APPENDIX No. 1.

## FISHING BOUNTIES.

The payments made for this service are under the authority of the Revised Statutes, 1906, chap. 46, intituled: 'An Act to encourage the development of the sea fisheries and the building of fishing vessels,' which provides for the payment of the sum of \$160,000 annually, under regulations to be made from time to time by the Governor General in Council.

#### REGULATIONS.

The regulations governing the payment of fishing bounties were established by the following Order in Council:—

AT THE GOVERNMENT HOUSE AT OTTAWA, TUESDAY, the 30th day of June, 1908.

#### Present:

#### HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

Whereas, in view of the Revision of the Statutes of Canada in 1906, it is necessary that the regulations governing the payment of fishing bounties which were adopted by Order in Council on the 10th December, 1897, be readopted under chapter 46 of Revised Statutes of Canada, 1906, "The Deep Sea Fisheries Act";

And whereas new conditions require certain changes in the existing regulations in

order to establish a better interpretation of the bounty system;

Therefore His Excellency, the Governor General in Council is pleased to order that the Regulations established by the Order in Council of the 10th December, 1897, under the provisions of 'The Bounty Act, of 1891,' 54-55 Victoria, chapter 42, shall be, and the

same are, hereby rescinded, and the following substituted therefor:-

1. Resident Canadian fishermen who have been engaged in deep sea fishing in Canadian vessels or boats for fish other than shell-fish, salmon and shad, or fish taken in rivers, or mouths of rivers, for at least three months, and have caught not less than 2,500 pounds of sea-fish, shall be entitled to a bounty; provided always, that no bounty shall be paid to men fishing in boats measuring less than 13 feet keel, and not more than 3 men (the owner included,) will be allowed as claimants in boats under 20 feet.

2. No bounty shall be paid upon fish caught in trap-nets, pound nets and weirs, nor upon the fish caught in gill-nets fished by persons who are pursuing other occupations than fishing, and who devote merely an hour or two daily to fishing these nets but

are not, as fishermen, steadily engaged in fishing.

3. Only one claim will be allowed in each season, even though the claimant may

have fished in two vessels, or in a vessel and a boat, or in two boats.

4. The owners of boats measuring not less than 13 feet keel, whether propelled by oars, sails or other motive power, which have been engaged during a period of not less than three months in deep sea fishing for fish other than shell-fish, salmon or shad, or fish taken in rivers or mouths of rivers, shall be entitled to a bounty on each such boat.

5. Canadian registered vessels, owned and fitted out in Canada, of 10 tons and upwards (up to 80 tons), by whatever means propelled contained within themselves, which have been exclusively engaged during a period of not less than three months in the catch of sea-fish other than shell-fish, salmon or shad, or fish taken in rivers, or mouths of rivers, shall be entitled to a bounty to be calculated on the registered tonnage which shall be paid to the owner or owners.

6. Owners or masters of vessels intending to fish and claim bounty on their vessels must, before proceeding on a fishing voyage, procure a license from the nearest Collector of Customs or Fishery Overseer, said license to be attached to the claim when sent in

for payment.

7. The date when a vessel's fishing operations shall be considered as having begun, shall be the day upon which she sails from port on her fishing voyage, after the license has been procured, and the date upon which her fishing season shall end, shall be the day upon which she arrives in port from her last fishing voyage prior to the 1st December. The three months during which vessel must have been engaged in fishing, to be entitled to the bounty, shall not include such periods as she may have been lying in port, provided that not more than three days may be permitted for the sale, transfer or discharge of her cargo of fish and refitting.

8. Dates and localities of fishing must be stated in the claim, as well as the quan-

tity and kind of sea-fish caught.

9. Ages of men must be given. Boys under 14 years of age are not eligible as claimants.

10. Claims must be sworn to as true and correct in all their particulars.
11. Claims must be filed on or before the 30th November in each year.

12. Officers authorized to receive claims will supply the requisite blanks free of charge, and after certifying the same will transmit them to the Department of Marine and Fsheries.

13. No claim in which an error has been made by the claimant or claimants shall

be amended after it has been signed and sworn to as correct.

14. Any person or persons detected making returns that are false or fraudulent in any particular may be debarred from any further participation in the bounty, and be liable to be prosecuted according to the utmost rigour of the law.

15. The amount of the bounty to be paid to fishermen and owners of boats and

vessels will be fixed from time to time by the Governor in Council.

16. All vessels fishing under bounty license are required to carry a distinguishing flag, which must be shown at all times during the fishing voyage at the main top-mast head. The flag must be four feet square in equal parts of red and white, joined diagonally from corner to corner. Any case of neglect to carry out this regulation reported to the Department of Marine and Fisheries will entail the loss of the bounty, unless satisfactory reasons are given for its non-compliance.

RODOLPHE BOUDREAU,

Clerk of the Privy Council.

The bounty for the year 1907 was distributed on the basis authorized by the following Order in Council, approved by the Governor General on the 29th January, 1908.

His Excellency the Governor General in Council is pleased to order, and it is hereby ordered that the sum of one hundred and sixty thousand dollars, payable under the provisions of chapter 46 of the Revised Statutes, 1906, intituled: 'An Act to encourage the development of the Sea Fisheries and the building of fishing vessels,' be distributed for the year 1907-1908, upon the following basis:—

Vessels: The owners of the vessels entitled to receive bounty shall be paid one dollar (\$1) per registered ton, provided, however, that the payment to the owner of any one vessel shall not exceed the sum of eighty dollars (\$80), and all vessel fishermen entitled to receive bounty shall be paid the sum of seven dollars and forty cents (\$7.40)

each.

Boats: Fishermen engaged in fishing in boats, who shall also have complied with

the regulations entitling them to receive bounty, shall be paid the sum of four dollars each, and the owners of fishing boats shall be paid one dollar (\$1) per boat.

#### RODOLPHE BOUDREAU,

Clerk of the Privy Council.

There were received during the year 1907, 13,267 claims being a decrease of 266 as compared with 1906.

The number paid during the year was 13,193, a decrease of 310 as compared with

the previous year.

The amount of bounty paid to vessels and their crews was \$61,785.60 and to boats and boat fishermen \$94,328.90 or a total of \$156,114.50 during the year.

Vessels to the number of 927 received the bounty, the aggregate tonnage being

21,831 tons, a decrease of 30 vessels and 2,801 tons, compared with 1906.

During the year bounty was paid to 12,266 boats and 20,520 boat fishermen, a decrease of 280 boats and 351 men.

DETAILED STATEMENT of Fishing Bounty Claims received and paid during the year 1907.

7)		Num	BER OF CLA	IMS.
Province.	County.	Received.	Rejected.	Paid.
Nova Scotia	Annapolis Antigoniah Cape Breton Cumberland Digby Guysborough Halifax Hants Inverness Kings Lunenburg Pictou Queens Richmond Shelburne Victoria	355 58 1,341 335 1,341 355 58 1,044 22 201 729 663 347	2 2 2 1 1 2 6	171 142 425 2 467 953 1,340  355 56 1,038 22 190 725 653 347
New Brunswick	Yarmouth.  Totals.  Charlotte.	7,124	37	7,087
New Drunswick	Gloucester Kent. Northumberland. Restigouche. St. John	375 41 6 1 33	3	372 41 6 1 32
	Totals	904	9	895
Prince Edward Island	Kings	585 282 133	9 2 5	576 280 128
	Totals	1,060	16	984
Quebec	Bonaventure	788 2,489 108 854	4 7	784 2,482 108 853
	Totals	4,239	12	4,227
	Grand totals	13,267	74	13,193

8-9 EDWARD VII., A. 1909

Detailed Statement of Fishing Bounties paid to Vessels in each County during the Year 1907.

Province.	County.	Number of Vessels.	Tonnage.	Average Tonnage.	Number of Men.	Amount paid.
						\$ cts.
Nova Scotia	Annapolis Antigonish Cape Breton Cumberland Digby Guysborough Halifax	4 3 15 1 48 58 56	57 45 268 23 1,220 916 1,210	14 25 15 00 17 86 23 00 25 42 17 52 21 60	22 9 77 3 297 255 299	219 50 111 60 837 80 45 20 3,417 80 2,803 00 3,418 10
	Hants Inverness	27	377	13 96	113	1,213 20
	Kings Lunenburg Pictou Queens Richmond Shelburne Victoria Yarmouth	115 1 2 52 147 10 73	7,738 16 24 1,095 2,284 131 1,637	67 28 16 00 12 00 21 06 15 54 13 10 22 42	1,663 2 9 278 674 45 432	20,044 20 30 80 90 60 3,152 20 7,271 60 463 40 4,833 80
	Totals	612	17,041	27 84	4,178	47,952 80
New Brunswick	CharlotteGloucester	51 207	891 2,711	17 47 13 09	168 822	2,134 20 8,793 80
	Kent. Northumberland Restigouche. St. John	3 1 3	33 26 59	11 00 26 00 19 67	8 3 9	92 20 48 20 125 60
	Totals	265	3,720	14 04	1,010	11,194 00
Prince Edward Island.	Kings Prince Queens	29 6 6	669 157 90	23 07 26 17 15 00	123 31 24	1,579 20 386 40 267 60
	Totals	41	916	22 34	178	2,233 20
Quebec	Bonaventure Gaspé.	7	106	15 14	29	320 60
	Rimouski	2	48	24 00	5	85 00
	Totals	9	154	17 11	34	405 60
	Grand totals	927	21,831	23 55	5,400	61,785 60

Detailed Statement of Fishing Bounties paid to Boats in each County during the Year 1907, showing also total amount paid to Vessels and Boats for the Year.

Province.	County.	Number of Boats.	Number of Men.	Amount paid.	Total Bounty paid to Vessels and Boats in 1907.
				\$ ets.	8 ets.
Nova Scotia	Annapolis Antigonish. Cape Breton Cumberland Digby Guysborough Halifax	167 139 410 1 419 895 1,284	270 208 748 2 714 1,379 1,720	$\begin{array}{c} 1,247 \ 00 \\ 971 \ 00 \\ 3,402 \ 00 \\ 9 \ 00 \\ 3,275 \ 00 \\ 6,411 \ 00 \\ 8,162 \ 15 \end{array}$	1,466 50 1,082 60 4,239 80 54 20 6,692 80 9,214 00 11,580 25
	Hants Inverness Kings Lunenburg Pictou Queens Richmond Shelburne Victoria Yarmouth	328 56 923 21 188 673 506 337 128	573 83 1,137 29 311 1.657 789 517 202	2,620 00 388 00 5,471 00 137 00 1,432 00 4,901 00 3,662 00 2,404 75 936 00	3,833 20 388 00 25,515 20 167 80 1,522 60 8,053 20 10,933 60 2,868 15 5,769 80
	Totals	6,475	9,739	45,428 90	93,381 70
New Brunswick	Charlotte Gloucester Kent. Northumberland Restigouche St. John.	392 165 41 3	610 411 74 6	2,832 00 1,807 50 337 00 27 00 257 00	4,966 20 10,601 30 337 00 119 20 48 20 382 60
	Totals	630	1,158	5,260 50	16,454 50
Prince Edward Island		547 274 122	923 568 259	4,239 00 2,545 75 1,158 00	5,818 20 2,932 15 1,425 60
	Totals	943	1,750	7,942 75	10,175 95
Quebec	Bonaventure Gaspé Rimouski Saguenay	784 2,475 108 851	1,343 4,886 178 1,466	6,154 50 22,011 25 820 00 6,710 00	6,154 50 22,332 85 820 00 6,795 00
	Totals	4,218	7,873	35,695 75	36,102 35
	Grand totals	12,266	20,520	94,327 90	156,114 50

#### GENERAL STATISTICS.

The fishing bounty was first paid in 1882.

The payments were made each year on the following basis:-

1882, vessels \$2 per ton, one half to the owner and the other half to the crew, Boats at the rate of \$5 per man, one-fifth to the owner and four-fifths to the men.

1883, vessels \$2 per ton, and boats \$2.50 per man, distributed as in 1882.

1884, vessels \$2 per ton, as in 1882 and 1883.

Boats from	14 to 18 feet keel	\$1.00
		. ψι ου
6.6	18 to 25 "	1 50
66	25.6	. 100
••	25 feet keel upwards	2.00
D 4 C - 1		
Boat usher	rmen	2 00

feet keel having been admitted in 1885, the rates were :-Boats from 13 to 18 feet keel, \$1; from 18 to 25 feet keel, \$1.50; from 25 feet keel upwards, \$2, and fishermen \$3 each.

1888, vessels \$1.50 per ton, one half each to owner and crew. Boats, the same as

1885, 1886 and 1887.

1889, 1890 and 1891, vessels \$1.50 per ton as in 1888. Boats \$1 each. Boat fishermen, \$3.

1892, vessels \$3 per ton, one-half each to owner and crew. Boats \$1 each. Boat fishermen \$3.

1893, vessels \$2.90 per ton, paid as formerly. Boats \$1 each. Boat fishermen \$3. 1894, vessels \$2.70 per ton, distributed as in previous years. Boats \$1 each. Boat

1895, vessels \$2.60 per ton, half each to owner and crew. Boats \$1 each. Boat fishermen \$3.

1896, vessels \$1 per ton, which was paid to the owners, and vessel fishermen \$5 each, clause No. 5 of the regulation having been amended accordingly. Boats \$1 each, and boat fishermen \$3.50 per man.

1897, vessels \$1 per ton, and vessel fishermen \$6 each. Boats \$1 each, and boat

fishermen \$3.50 per man.

1898, vessels \$1 per ton, and vessel fishermen \$6.50 each. Boats \$1 each, and boat fishermen \$3.50 per man.

1899, vessels \$1 per ton, and vessel fishermen \$7 each. Boats \$1 each, and boat fishermen \$3.50 per man.

1900, vessels \$1 per ton, and vessel fishermen \$6.50 each. Boats \$1 each, and boat fishermen \$3.50 per man.

1901, vessels \$1 per ton, and vessel fishermen \$7 each. Boats \$1 each, and boat fishermen \$3.50 per man.

1902, vessels \$1 per ton, and vessel fishermen \$7.25 each. Boats \$1 each, and

boat fishermen \$3.80 per man.

1903, vessels \$1 per ton, and vessel fishermen \$7.30 each. Boats \$1 each, and boat fishermen \$3.90 per man.

1904, vessels \$1 per ton, and vessel fishermen \$7.15 each. Boats \$1 each, and boat fishermen \$3.75 per man.

1905, vessels \$1 per ton, and vessel fishermen \$7.10 each. Boats \$1 each and boat fishermen \$3.65 per man.

1906, vessels \$1 per ton, and vessel fishermen \$7.10 each. Boats \$1 each and boat fishermen \$3.75 per man.

1907, vessels \$1 per ton, vessel fishermen \$7.40 each. Boats \$1 each and

fisherman \$4 per man.

Since 1882, 21,537 vessels, totalling a tonnage of 731,493 tons, have received the bounty. The total number of vessel fishermen which received bounty is 161,406, being an average of about 7 men per vessel.

The total number of boats to which bounty was paid since 1882 is 349,068, and the number of fishermen 633,546. Average number of men per boat about 2.

The highest bounty paid per head to vessel fishermen was \$21.75 in 1893; the lowest 83 cents, while the highest to boat fishermen was \$4, the lowest \$2.

The general average paid per head is \$6.42.

COMPARATIVE STATEMENT by Provinces for the Years 1882 to 1907, inclusive, showing:—
(1) Total number of Fishing Bounty Claims received and paid by the Department of Marine and Fisheries.

Year.	Nova Sc	COTIA.	New Bru	NSWICK.	P. E. Is	LAND.	QUEBI	EC.	Тота	L.
I EAR.	Received.	Paid.	Received.	Paid.	Received.	Paid.	Received.	Paid.	Received.	Paid.
1882	6,730	6,613	1,257	1,142	1.169	1,100	3,162	3,117	12,318	11,972
1883	7,171	7,076	1,693	1,579	1,138	1,106	3,602	3,325	13,604	13,086
1884	7,007	6,930	1,252	1,224	923	885	3,470	3,429	12,652	12,468
1885	7,646	7,599	1,609	1,588	1,117	1,025	3,943	3,912	14,315	14,124
1886	7,639	7,702	1,767	1,763	1,131	1,080	4,275	4,355	14,812	14,900
1887	8,262	8,227	1,975	1,958	1,201	1,126	4,138	4,105	15,576	15,416
1888	8,481	8,429	2,065	2,026	1,153	834	4,328	4,310	16,027	15,599
1889	8,816	8,523	2,428	2,392	1,211	1,511	4,664	4,652	17,119	17,078
1890	9,337	9,429	2,522	2,469	1,352	1,257	4,860	4,804	18,071	17,959
1891	10,242	10,063	2,831	2,084	1,482	1,446	5,108	4,913	19,663	18,506
1892	8,272	8,186	1,067	1,001	1,065	1,051	4,425	4,204	14,829	14,442
1893	7,926	7,844	967	881	1,027	1,012	4,059	3,898	13,979	13,635
1894	8,640	8,600	925	911	983	963	3,948	3,876	14,496	14,350
1895	8,835	8,825	979	975	1,009	1,025	3,904	3,955	14,727	14,780
1896	8,597	8,562	1,137	1,064	1,111	1,120	4,366	4,229	15,211	14,975
1897	8,450	8,418	1,042	991	1,175	1,171	4,180	4,149	14,847	14,729
1898	8,446	8,347	934	917	1,143	1,145	4,156	4,092	14,679	14,501
1899	7,894	7,754	849	825	1,016	947	4,134	4,102	13,893	13,628
1900	7,484	7,452	904	904	1,119	1,169	4,264	4,251	13,771	13,776
1901	7,346	7,344	829	826	941	937	4,277	4,267	13,393	13,374
1902	6,710	6,671	802	794	913	912	4,371	4,346	12,796	12,723
1903	6,297	6,284	832	830	978	974	4,110	4,090	12,217	12,178
1904	6,750	6,732	879	866	1,027	994	4,095	4,079	12,751	12,671
1905	7,034	7,018	881	873	921	921	4,350	4,329	13,186	13,141
1906	7,434	7,415	930	923	918	916	4,251	4,249	13,533	13,503
1907	7,124	7,087	904	895	1,000	984	4,239	4,227	13,267	13,193
Totals.	204,570	203,130	34,260	32,701	28,223	27,611	108,679	107,265	375,732	370,707

8-9 EDWARD VII., A. 1909 (2) Number of vessels, tonnage and number of men which received Bounty in each year.

	Nov	7A SCOT	IA.	New Brunswick.			P. E. ISLAND.			(	QUEBEC			TOTAL.	
YEAR.	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.
882	588	22,841	5,343	120	2,171	531	15	389	74	63	2,210	538	786	27,611	6,48
883	700	29,788	6,238	126	2,102	496	16	450	66	62	2,236	443	904	34,576	7,24
884	700	29,828	6,327	139	2,289	560	16	582	92	56	1,965	382	911	34,664	7,36
88å	629	27,709	5,897	128	2,120	496	19	597	113	55	1,791	317	831	32,217	6,82
886	562	25,375	5,022	145	2,628	520	32	1,071	215	52	1,730	320	791	30,804	6,07
887	566	24,520	4,900	154	2,889	563	38	1,677	338	54	1,883	334	812	30,969	6,13
888	589	26,008	5,450	150	2,545	544	37	1,245	249	51	1,842	388	827	31,640	6,63
889	597	27,123	5,684	153	2,590	565	35	1,274	239	48	1,729	330	833	32,716	6,81
890	540	23,955	4,935	133	2,129	447	32	1,002	203	34	1,182	220	739	28,268	5,80
891	527	22,780	4,618	124	2,051	411	27	778	155	27	924	168	705	26,533	5,35
892	507	22,279	4,611	108	1,683	343	30	983	139	23	803	159	668	25,748	5,25
893	536	23,195	4,780	210	2,922	634	27	910	151	32	952	179	805	27,979	5,74
894	602	24,735	5,077	238	3,189	721	21	594	114	38	1,066	178	899	29,584	6,09
.895	603	25,018	5,184	238	3,107	764	27	769	129	39	1,262	173	907	30,156	6,25
.896	553	23,415	4,607	250	3,337	800	23	656	114	36	1,143	144	862	28,551	5,6€
.897	507	21,323	4,829	239	3,079	816	20	490	109	94	833	116	790	25,725	5,87
.898	505	20,868	4,840	239	3,155	859	24	561	125	16	524	77	784	25,108	5,90
.899	519	22,538	5,323	238	3,131	885	15	373	76	17	497	78	789	26,539	6,36
.900	525	22,474	5,352	234	2,969	890	29	737	153	14	459	76	802	26,639	6,47
.901	508	21,469	5,158	242	3,229	872	23	541	115	13	366	69	786	25,605	6,21
.902	505	21,248	5,126	249	3,293	972	28	630	135	13	350	51	795	25,521	6,28
903	546	21,992	5,173	259	3,454	971	36	765	169	10	290	48	851	26,501	6,36
904	552	21,285	5,040	257	3,429	981	30	594	126	15	382	73	854	25,690	6,22
905	620	21,240	5,238	264	3,600	1,035	28	587	125	10	<b>2</b> 59	56	922	25,686	6,45
1906	644	20,008	4,891	273	3,753	1,066	32	732	147	8	139	33	957	24,632	6,13
1907	612	17,041	4,178	265	3,720	1,010	41	916	178	9	154	34	927	21831	5,40
Totals .	14,842	510,055	133,821	5,175	74,564	18,752	701	19,903	3.849	819	26,971	4,984	21.537	731,493	161,40

(3) Number of Boats and boat fishermen which received Bounty in each year.

-	Nova	SCOTIA.	NEW BRU	UNSWICK.	P. E. I	SLAND.	QUE	BEC.	To	ΓAL.
YEAR.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. o Men.
1882	6,043	12,130	1,024	2,530	1,087	3,070	3,071	5,716	11,225	23,44
1883	6,458	13,553	1,453	3,309	1,098	3,106	3,266	6,188	12,275	26,15
1884	6,257	12,669	1,086	2,505	869	2,346	3,344	6,416	11,556	23,93
1885	6,970	13,396	1,460	3,254	1,006	2,606	3,857	7,485	13,293	26,74
1886	7,140	13,351	1,618	3,567	1,048	2,547	4,303	7,981	14,109	27,44
1887	7,662	13,997	1,804	3,994	1,088	2,711	4,051	7,550	14,605	28,25
1888	7,840	14,115	1,876	4,148	797	2,141	4,259	7,852	14,772	28,25
1889	7,926	14,118	2,237	5,032	1,475	3,568	4,602	8,807	16,240	31,52
1890	8,886	15,738	2,324	5,242	1,192	3,024	4,766	9,241	17,168	33,24
1891	9,525	16,552	1,928	4,126	1,383	3,427	4,865	9,402	17,701	33,50
1892	7,679	12,307	893	1,765	1,021	2,047	4,181	7,693	13,774	23,81
1893	7,308	11,748	671	1,314	985	1,962	3,866	7,245	12,830	22,26
1894	7,956	12,899	661	1,281	913	1,813	3,821	7,139	13,351	23,13
1895	8,222	13,106	737	1,434	998	2,141	3,916	7,877	13,873	24,55
1896	8,008	12,454	814	1,553	1,095	2,126	4,189	7,688	14,106	23,82
1897	7,911	12,542	752	1,351	1,151	2,147	4,125	7,572	13,939	23,61
1898	7,872	12,438	678	1,237	1,121	2,199	4,076	7,627	13,747	23,50
1899	7,235	11,305	587	1,027	932	1,710	4,085	7,696	12,839	21,73
1900	6,927	10,645	670	1,184	1,140	2,198	4,237	8,004	12,974	22,03
1901	6,836	10,464	584	1,001	914	1,735	4,254	8,017	12,588	21,21
1902	6,166	9,442	545	966	884	1,638	4,333	8,180	11,928	20,22
1903	5,738	8,775	571	964	938	1,722	4,080	7,688	11,327	19,14
1904	6,180	9,556	609	1,082	964	1,792	4,064	7,648	11,817	20,07
1905	6,398	9,822	609	1,047	893	1,630	4,319	8,002	12,219	20,50
1906	6,771	10,138	650	1,139	884	1,648	4,241	7,946	12,546	20,87
1907	6,475	9,739	630	1,158	943	1,750	4,218	7,873	12,266	20,52
T tals	188,389	316,999	27,471	57,210	26,819	58,804	106,389	200,533	349,068	633,54

8-9 EDWARD VII., A. 1909

## (4) Total Number of men who received Bounty each year.

Year.	Nova Scotia.	NEW Brunswick.	P. E. ISLAND.	Quebec.	TOTAL.
	No. of Men.	No. of Men.	No. of Men.	No. of Men.	
1882	17,473	3,061	3,144	6,254	29,932
1883	19,791	3,805	3,172	6,631	33,399
1884	18,996	3,065	2,438	6,798	31,297
1885	19,293	3,750	2,719	7,802	33,56
1886	18,373	4,087	2,762	8,301	33,52
1887	18,897	4,557	3,049	7,884	34,38
1888	19,565	4,692	2,390	8,240	34,88
1889	19,802	5,597	3,807	9,137	38,34
1890	20,673	5,689	3,227	9,461	39,05
1891	21,170	4,537	3,582	9,570	38,85
1892	16,918	2,108	2,186	7,852	29,06
1893	16,528	1,948	2,113	7,424	28,01
1894	17,976	2,002	1,927	7,317	29,22
1895	18,290	2,198	2,270	8,050	30,80
1896	17,061	2,353	2,240	7,832	29,48
1897	17,371	2,167	2,256	7,688	29,48
1898	17,278	2,096	2,324	7,704	, 29,40
1899	16,628	1,912	1,786	7,774	28,10
1900	15,997	2,074	2,351	8,080	28,50
1901	15,622	1,873	1,850	8,086	27,43
1902	14,568	1,938	1,773	8,231	26,51
1903	13,948	1,935	1,891	7,736	25,51
1904	14,596	2,063	1,918	7,721	26, 29
1905	15,060	2,082	1,755	8,058	26,95
1906	15,029	2,205	1,795	7,979	27,00
1907	13,917	2,168	1,928	7,907	25,92
Totals	450,820	75,962	62,653	205,517	794,955

SESSIONAL PAPER No. 22

## (5) Total annual payments of fishing Bounty.

YEAR.	Nova Scotia.	New Brunswick.	P. E. Island.	Quebec.	Total.
	\$ cts.	\$ ets.	\$ ets.	\$ ets.	\$ ets.
1882	106,098 72	16,997 00	16,137 00	33,052 75	172,285 47
1883	89,432 50	12,395 20	8,577 14	19,940 01	130,344 85
1884	104,934 09	13,576 00	9,203 96	28,004 93	155,718 98
1885	103,999 73	15,908 25	10,166 65	31,464 76	161,539 39
1886	98,789 54	17,894 57	10,935 87	33,283 61	1.60,903 59
1887	99,622 03	19,699 65	12,528 51	31,907 73	163,757 92
1888	89,778 90	18,454 92	9,092 96	32,858 75	150,185 53
1889	90,142 51	21,026 79	13,994 53	33,362 71	158,526 54
1890	91,235 64	21,108 33	11,686 32	34,210 72	158,241 01
1891	92,377 42	17,235 96	12,771 30	34,507 17	156,891 88
1892	109,410 39	10,864 61	9,782 79	29,694 35	159,752 1
1893	108,060 67	12,524 09	9,328 62	28,320 72	158,234 1
1894	111,460 03	12,690 80	7,875 79	28,040 18	160,066 86
1895	110,765 27	12,919 32	9,285 13	30,598 27	163,567 99
1896	98,048 95	13,602 88	9,745 50	32,992 44	154,389 7
1897	102,083 50	13,454 50	9,809 00	32,157 00	157,504 0
1898	103,730 00	13,746 00	10,188 00	31,795 00	159,459 0
1899	106,598 50	13,514 50	7,822 00	32,065 00	160,000 0
1900	101,448 00	13,562 50	10,589 00	33,203 00	158,802 50
1901	101,024 50	13,420 50	8,335 50	33,161 50	155,942 0
1902	100,455 70	14,555 80	8,716 55	36,125 45	159,853 5
1903	99,714 15	14,872 75	9,652 50	34,704 30	158,943 7
1904	99,286 44	15,110 80	9,179 35	33,651 65	157,228 2
1905	100,664 35	15,379 50	8,317 20	34.185 60	158,546 6
1906	99,518 80	16,247 55	8,839 40	34,410 00	159,015 7
1907	93,381 70	16,454 50	10,175 95	36,102 35	156,114 5
Totals	2,612,062 03	397,217 27	262,736 52	833,799 95	4,105,815 77

## 8-9 EDWARD VII., A. 1909

List of Vessels which received Fishing Bounty in the Year 1907-1908.

## PROVINCE OF NOVA SCOTIA.

### ANNAPOLIS COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
103066 111998 85533 77969	Eddie J Jessie K. Minnie C	Annapolis	23 11 12 11	James W. Snow Thos. Milner Stephen Haynes David Hayden	Port Wade Parker's Cove Victoria Beach . Port Wade		\$ cts.  89 60 33 20 49 00 33 20
		ANTIC	ON	SH COUNTY.			
103542 116882 111798	Emma Brow Fiona Marie C		17 10 18	John Brow	Hbr. au Bouche. Auld's Cove	3 3 3	39 20 32 20 40 20
	1	CAPE	BRE	TON COUNTY.			
100846 100389 100372 90834 88462 100383 116883 122026 107375 107376 111992 112386 107359 107351	Annie F. Betsy Jane Diego. Fannie S. Florence L. Grayling Hy. D. Davis Manetto. Minnie B. Rozzie St. Thomas Shamrock Victoria	Sydney Port Medway Arichat. Sydney Arichat. Liverpool. Halifax. Sydney Arichat. Sydney	11 27 28 10 25 38 21 10 17 10 11	Gabriel Billard R. Fudge Alex. Lee. Jacob Rogers Benj. Boon	Mainadieu. L. Bras d'Or. Port Morien  "Mainadieu. North Sydney. Lingan.  Louisburg. North Sydney. L. Lorraine. North Sydney. Bateston.	3 4 7 7 4 3 12 10 4 4 3 3 4	63 00 35 20 40 60 78 80 79 80 39 60 47 20 128 80 95 00 39 60 46 60 32 20 33 20 40 60 32 20
		CUMBI	ERL	AND COUNTY.			
111425	Effie Howard	Halifax	. 23	E. R. Heather	Pugwash	. 3	45 20
		DI	GBY	COUNTY.			
112286 111528 116235 107807 112102 100547 100813 74331 116236 103181 103749 116446	Alart. Alcyone America Aniadne B and C Blanche. Condor Cora May Curlew Emerald. Emerson Faye.	St. John.  Digby. Barrington Yamouth Digby.	$egin{array}{c c} 52 & 16 \\ 48 & 48 \\ 14 & 24 \\ 11 & 64 \\ 63 & 29 \\ 47 & 47 \\ \end{array}$	Howard Anderson Reuben Thurber. H. D. Outhouse. Edwin Hains. N. Robbins. Howard Titus C. E. Finigan. Geo. Denton Ansel Casey Edwin Hains.	Maylette. Digby Freeport. Tiverton. Freeport. Tiverton. Westport Freeport. Westport Digby. Freeport.	10 5 13 5 19 19 19 19	135 80

## List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

#### DIGBY COUNTY—Concluded.

				N 1 1 — Conciuaea.			
Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
107604 111527 74329 1122849 122097 111688 111530 116234 111525 111838 122571 75851 1122101 122144 121816 116237 122241 103184 111836 116232 116660 1111834 111835 107610 107334 111840 121814 103179 94694 103711 103711 103711	Etta H Fairy Queen Florence H Florence May George L	Yarmouth Shelburne Digby Digby Yarmouth Weymouth Yarmouth Digby St. Andrews Digby Weymouth Digby Weymouth Digby Yarmouth Digby Yarmouth Digby Yarmouth Digby "" Weymouth Digby "" Usymouth Digby	20 10 13 20 14 13 71 29 21 13 16 18 22 13 71 29 21 13 14 29 21 13 14 29 15 16 17 29 17 17 29 17 29 17 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 29 17 20 10 10 10 10 10 10 10 10 10 10 10 10 10	F. S. Doucette. Warren Buckman. S. & F. Frost. Jas. A. Moore. Geo. Farnsworth. Jno. J. LeBlanc E. P. Greenwood Geo. C. Stevens. Esrom Thurber. Whale Cove Tr'd'g Co. J. F. Milberry. Jas. Doucette. Michel Comeau. Thomas Denton. L. Boudreau. E. C. Deveau. Jos. E. Snow. A. R. Bailey. Wm. McGrath Jno. W. Snow. Moses Thibodeau. Wm. McDormand P. Doucette. Wm. W. Gower. Jos. D. Weaver. Rudolph Thurber. Moses Therriau. Joseph D. White F. S. Lent. Edwin Hains. Hilbert Garron. F. P. Titus J. A. Ellis. Edward Keans.	Westport. Little River Westport Tiverton. Mavilette. N. E. Harbour. Freeport. Whale Cove Digby. Mavilette. Little River Mavilette. Salmon River Digby. Westport Digby. Church Point Westport Mavilette.  "Westport Mavilette.  "Westport St. Bernard. Freeport Meteghan Port Gilbert Freeport "Westport	9 4 4 3 18 4 11 5 3 5 4 4 2 5 4 2 1 5 1 6 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1	57 00 32 20 42 60 42 20 43 60 42 60 159 80 95 60 39 60 43 60 102 20 47 60 34 20 213 20 38 40 41 8 40 63 00 37 20 49 00 48 00 38 20 31 80 64 00 38 20 31 80 105 00 107 00 33 20 33 20 53 60 95 20
	<u> </u>	GUYS	BOF	RO COUNTY.	J		
107992 112021 112016 112020 112375 116734 103328 117054 116347 116390 117093 107993 112373 100818 107996 117091 116740 103470 112374 111910	Alice J. Davis Annie M. Blanche Bonny Kate. C. G. Munroe Cora Lee Ella May Emma Jane. Ethel. Ethel G. Florence D. Florence May Flying Cloud Geneva Ethel Green Linnet. Hazel Maud Hilda M. Horton Ida M. Burke. J. B. Saint Lizzie J. Greenleaf Lizzie May	Canso  Arichat. Halifax. Pt. Hawkesbury. Canso. Arichat.  "" Canso. Arichat. Barrington. Canso. Arichat. Halifax. Arichat.	20 29 13 14 14 16 34 16 11 12 11 11 13 29 16 18 11	Edward Hearn. John Leary. Simon Williams. Rory Sutherland. Chas. A. Mosher Harvey Munroe. Hibbert Carr John George. J. R. Sinclair. Daniel George. Wm. Diggdon John Kennedy. Simon Manett. Martin Meagher. Thos. Boudrot, Jr. Jas. Rhynold, Jr. E. F. C. Horton	Canso.  "White Head. Mulgrave Up. White Head Canso. Lr. White Head. Canso. Larry's River. Canso. Dover  Port Beckerton. Larry's River. Half Isl'd Cove. Charlo's Cove.	4555557453534434566	49 60 58 60 50 00 51 00 51 00 53 00 71 00 67 80 40 60 49 00 33 20 48 00 53 60 41 60 58 60 58 60 58 60 62 40 41 60

8-9 EDWARD VII., A. 1909

## LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

#### GUYSBORO' COUNTY—Concluded.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No of Crew paid.	Amount of Bounty paid.
117078	Lottie M. Beatrice.	Arichat	17	Hiram Hendsbee, Sr	Half Isl'd Cove.	6	\$ ets. 61 40
117100	Louise Ellen		11	Daniel Casey	White Head	5	48 00
117094 $112018$	Maggie Alice Maggie Bell	Canso	11 26	John D. Cashin Jas. W. Grady	Port Felix	3 7	33 20 77 80
117056	Margaret		16	Matthews & Scott	Canso	2	30 80
111909 112371	Margaret May	Arichat	12 11	J. E. Sullivan Daniel Pitts	Charle's Core	5 4	49 00 40 60
116886	Mary J	[ H		J. J. Berrigan	Canso	6	55 40
117053 111475	Mary M. Bell Mary Matilda	Canso	10 15	Jno. Belfountaine	Port Felix	3	32 20
100816	Mattie Morrissev	Canso	24	Benj. David	Larry's River Port Felix	$\frac{4}{7}$	44 60 75 80
107999 107757	Maud S. Mayflower.	Charlotteter	12 18	Havelock Munroe	Canso	4	41 60
100446	Minnie May	Canso	11	J. R. Lumsden C. H. Richard	Charlo's Cove	3 6	40 20 55 40
103547 117051	Morning Glory Muriel G	Halifax	11	J. J. Gerrior	Larry's River	4	40 60
80970	Orion	Halifax.	21 24	Alden Munroe Joseph Pelrine	Larry's River	4 4	50 60 53 60
112024 $112372$	Reta S	Canso	13	William Shrader	Canso	3	35 20
103461	River Swan St. Lidwina	Arienat	11	Geo. Berrigan	Cole Harbour	$\frac{1}{3}$	18 40 33 20
108000 107318	St. Lidwina St. Patrick	Canso	18	G. L. Avery	Larry's River	7	69 80
74139	St. Stephen	Halliax	19 44	Moses Cohoon Isaiah Fougere	Canso Larry's River	2 8	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
111413 112023	Sadie	Lunenburg	13	William Dort	Cole Harbour	3	35 20
116884	Silver Bell	Arichat	14 20	E. B. Pelrine.  Joseph Bonvie	Larry's River	4 4	43 60 49 60
112025	Squanto	Canso	13	F. H. Hawes	Canso	4	42 60
96962 116885	Sunrise	Yarmouth	18	Thurlo Munroe	L. White Head.	6 3	$\begin{array}{ccc} 62 & 40 \\ 32 & 20 \end{array}$
117055	Thelma	Canso	15	A. M. Roberts	Canso	1	22 40
117052 $116532$	Thrush	Lunenburg	10 14	David Myers James Lukeman	Hazal Hill	3 6	32 20 58 40
103199	Trilby	Canso	12	Edwd Flaherty	Canso	2	26 80
107994 107991	True Love Two Brothers	II	10 14	David Walsh. Fredk. Jello	Port Foliv	$\begin{bmatrix} 2 \\ 6 \end{bmatrix}$	24 80 58 40
117057	Utowana		15	Frank Lohnes	Canso	5	52 00
116887	Wenona	Arichat	10	John Uloth	Cole Harbour	5	47 00
		HALI	FA:	X COUNTY.	,		
94632	A. C. Greenwood	Shelburne	15	Ernest Mason	Tangier	4	44 60
122301	Active	Lunenburg	35	Frank Young.	Musquodoboit H	8	94 20
116526 107313	Adelaide	LI a life and	13 16	James F. Gray Wm. McPherson	Pennant	3 4	35 20
122422	Annie G. W. Annie May. B. & B. Holland. Dove Duchess. Edith L.	11	17	Jas. Westhaver	Sober Island	2	$\frac{45}{31} \frac{60}{80}$
121933 103858	B. & B. Holland	11	$\frac{24}{26}$	J. A. Gerrard Richd. Holland	Gerrard's Island	4	53 60
117145	Dove	11	10	Geo. Myria, et al	Petneswick H'h'r	7 4	77 80 39 60
111428 $112280$	Duchess Edith L	Dighy	12 26	David Morash	West Dover	5	49 00
122010	Ena T	Lunenburg	17	William Hubley	Indian Harbour.	$\begin{bmatrix} 3 \\ 5 \end{bmatrix}$	48 20 54 00
111434 117141	Ermynthrude Etha May		36 11	F. J. Darrach	Herring Cove	10	110 00
100247	Fairy Queen	11	.11	George Johnson G. H. Nickerson	Sambro	3	$\frac{40}{33} \frac{60}{20}$
116290 80829	Flora M. J	11	78	John Julien, et al	Grand Desert	18	211 20
100259	Florence G	11	$\frac{32}{15}$	G. L. Baker Caleb. Gray	Sambro	4 4	61 60 44 60
111432	Gladys Elena	11	16	U. W. Twohig	Pennant	3	38 20
100011	Grace D	н	10	Geo. Slaunwhite	Terence Bay	5	47 00

## List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

#### HALIFAX COUNTY—Concluded.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.	
							\$ cts.	
103312 96797 116203 116513	Grand Desert Gretta. Handy Andy Hattie. Jeannie & Annie Jessie W Katie M Laura Laura Phoebe. Laurie H Louisa Maud M. A. Josey Maggie Milson Maggie Milson Maple Leaf Mary A. Dunphy Mary E. Faulkner May May Maggie Wilson Mary A. Dunphy Mary E. Faulkner May Millo Mary A. Dunphy Millo Mary B. Faulkner May Millo Mary B. Faulkner May Millo Minnie M. Dora Monica A. Thomas Neva Perseverance Reliance Rising Sun Rosie M. B St. Patrick Spindrift Theresa M. Gray Tivoli Valkyria Violet Vixen	Lunenburg Halifax.  Pt. Hawkesbury Halifax.  Lunenburg Halifax.  """ """ """ """ """ """ """ """ """	11 12	Martin Julien, et al. Alton Russell, et al. J. P. Westhaver Arthur Jollymore. R. J. Mason Leander Hubley. Charles Nelson Reuben Cooper Arthur Day Geo. Pelham. Jer. Slaunwhite. Harry Graves. L. M. Josey, et al. James Marryatt F. J. Fleming Edward Dempsey. Eli Baker. Simon Lapierre. Harry Gibbs. John Faulkner. M. Slaunwhite. J. W. Gorman John Beaver. C. H. Thomas Ephraim Marryatt Rupert Shatford James Ruder. Richd. Christian Fred Bonang et al. Harris Corkum C. Rhodenizer Angus Gray David Duggan. Harvey Covey. Jas. H. Smith Henry McKenzie.	Clam Harbour. Sober Island. Indian Harbour. Tangier Indian Harbour. Halifax. Tangier Jeddore Herring Cove. Terence Bay East Dover. Spry Bay Pennant. Ketch Harbour. Herring Cove. East Jeddore Grand Desert. Halifax. West Jeddore Terence Bay Herring Cove. Spry Bay. Herring Cove. Spry Bay. Herring Cove. Indian Hbr. Boutilier's Cove. Indian Hbr. East Dover. Indian Hbr. East Dover. Indian Hbr. East Dover. Indian Hbr.	5 3 2 3 5 8 4 4 3 6 4 3 5 3 3 2 2 3 4 8 9 9 7 7 8 9 5 4 3 4	198 20 36 20 52 00 19 40 34 20 25 80 55 00 75 20 45 60 43 20 46 60 41 40 124 80 76 80 62 40 43 20 64 60 62 40 43 80 65 60 60 20 134 80 25 80 34 20 60 00 134 80 76 80 76 80 76 80 77 80 78 80 78 80 78 80 78 60 61 00 42 60 43 420 44 60 44 60 45 60 47 60 48 60 49 60 60 00 60 0	
85378	Zephyr	11	16	Robt. Slaunwhite	Terence Bay	7	67 80	
INVERNESS COUNTY.								
96778 103313 96825 103373 83196 96774 112380 103317 107997 111795 103316 103315 96775 103330 96779 96771 96777	Campania Catherine. Cecilia W Elizabeth Ann Ethel Blanche. Florence. Florence. Flying Star. Gertie Bell Katie J Laura Lillie. Louise. Lucy. Majestic Marie. Marie Joseph Mary	Pt. Hawkesbury Halifax Pt. Hawkesbvry Pictou Pt. Hawkesbury Arichat Pt. Hawkesbury Canso Pt. Hawkesbury	11 10 41 11 17 11 25 11 15 11 10 12 11 11 12 11 11 11 11	C. Robin, Collas Co  David Walker David Bourgeois W. J. Malcolm. S. Belfontaine Patk. Chiasson S. Belfontaine C. Robin, Collas Co. John McNeil C. Robin, Collas Co. Peter Fiset S. Belfontaine Theophile Mallet C. Robin, Collas Co. Fabien Desveaux et al. C. Robin, Collas Co. Fabien Desveaux et al. C. Robin, Collas Co.	Pt. Hawkesbury Belle Marche Pt. Hawkesbury Eastern Hbr Little River Eastern Hbr  Pt. Hawkesbury Eastern Hbr  "" Little River Eastern Hbr "" Little River Eastern Hbr	4 2 4 5 4 4 3 4 4	48 00 39 60 48 40 40 60 31 80 40 60 62 09 44 60 33 20 41 60 48 00 41 60 39 60 41 60 39 60 40 60 39 60	

## 8-9 EDWARD VII., A. 1909

## List of Vessels which received Fishing Bounty, &c.—Nova Scotia.—Con.

## INVERNESS COUNTY-Concluded.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
111797	Mizpah St. Aubin Saint Helier Surprise	Pt. Hawkesbury  Canso  Pt. Hawkesbury	13 10 15 12 15	Hyac. Chiasson Thomas Harris C. Robin, Collas Co Daniel McDonnell C. Robin, Collas Co S. Belfontaine	Plateau Grand Etang Eastern Hbr Judique Eastern Hbr	4 5 4 4 6 4	\$ cts. 64 40 42 60 47 00 44 60 41 60 59 40 39 60 40 60 65 40

#### LUNENBURG COUNTY.

		,					
84400**	A T 3	T 1	00	D + Cl 1 1	T	9	44 90
111837	A. L. B		22	Brenton Cleveland		3	44 20
112126	Acadia		91	Alex. Knickle	11	17	205 80
116517	Acme		91	Wm. C. Smith	11	17	205 80
111641	Aguadilla	11	100	Freeman Anderson Obadiah Deal	11	18	213 20
122302	Albata	11	20			3	42 20
112115	Aldine	11	99	A. V. Conrad		17	205 80
112107	Alexandra	11	93	Freeman Anderson	Lunenburg	17	205 80
111647	Alhambra	11	90	A. R. Morash	11	15	191 00
112105	Alma Nelson	11	99	A. R. Morash		18	213 20
112101	Ambition	11	100	Willet Conrad	Rose Bay	19	220 60
116522	Anita	11	16	Solomon Winters		5	53 00
111750	Arabia		80	John B. Young	Lunenburg	18	213 20
112122	Atalaya	"	79	Wm C Smith		17	204 80
116468	Beatrice S. Mack	11	99	Wm. C. Smith		$\overline{17}$	205 80
111734	Blake	11	99	J. N. Rafuse.	Conquerall Bank	20	228 00
111732	Calavera.		90	Abraham Ernst	Mahone Bay	18	213 20
112128	Campania		90	Thomas Romkey		17	205 80
112116	Cardinia		100	Freeman Anderson		17	205 80
116505		11	70	W. N. Reinhardt		17	195 80
	Cavalier	11		Lerov Boliver		3	35 20
121999	Cavalier	H	13				213 20
111702	Colonia	11	98		Lunenburg	18	
121997	Confidence	11	35		La Have Islands	8	94 20
111743	Corean	11	70	J. N. Rafuse		16	188 40
111736	Coronation	11	98	H. W. Adams		18	213 20
111637	Cyril	11	100	W, N. Reinhardt		19	220 60
111711	Defender	11	98	Alex. Knickle		17	205 80
122002	Dolly Grey	11	13	Samuel Knock		3	35 20
116540	Douglas Adams	11	98	H. W. Adams		17	205 80
116506	E. M. Zellars	11	84	Henry Moser		18	213 20
122009	Earl Grey	11	98	E. F. Zwicker	11	18	213 20
111730	Earle V. S	11	100	John B. Young	11	18	213 20
116528	Edith F. S		67	John Schmeisser	E. M. La Have.	15	178 00
. 121866	Eldora		79	Amiel Corkum	Middle La Have	17	204 80
112099	Electro		88	Edmen Walters	Middle La Have	19	220 60
83308	Ella	Liverpool	10	J. C. Hanson	Mahone Bay	1	17 40
121994	Ella Mason	Lunenburg	74	Isaac Mason	Lunenburg	18	207 20
112087	Ethel		99	W. N. Reinhardt		17	205 80
116518	Eva June	0	93	Wm. C. Smith		17	205 80
116520	Evelyn	11	18	Daniel Deal		3	40 20
122304	EvelynFalconFlorence B	11	85	Edmen Walters		20	228 00
122004	Florence B	11	46	William Duff		4	75 60
107350	Forrester	Shelburne	23	Chas. Mosher	Lower La Have	5	60 00
116525	Gatherer	Lunanhurg		Wm. C. Smith	Lunenburg	4	44 60
121851	Gladys B. Smith		100	THE C. MILLOIL	Little Circuit S		228 00
121867	Gladys F	"	79	J. N. Rafuse	Conquerall Bank	17	197 80
				J. E. Backman	Riverport	18	213 20
211112	, GIGHWOOD	"	1 .7.7	. Dackman.,	(itiverport,)	10	210 20

# LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con. LUNENBURG COUNTY—Continued.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
116507	Golden Rod	Lnnenburg	76	Adnah Burns	Dayspring	16	194 40
116527	Guide	11	73	W N Reinhardt	La Have	16	191 40
121863 116442	Hazel	11	71 98	Jeffrey Publicover John Westhaver	Lunenhurg	14 18	174 60 213 20
122005	Henry L. Montague	11	96	Wm. C. Smith	II	20	228 00
121857	Hiawatha	11	99	Wm. C. Smith	T T	18	213 20
112993 112089	Hilda M. Backman Iona W	11	81 78	Willet Conrad Abraham Ernst	Mahone Bay	17	205 80
107116	Ivy.	11	12	Samuel Zellars	Feltzen South	3	34 20
121858	J. A. McLean	H		Aubrey Anderson	Lunenburg	15	191 08
107960 $111726$	J. W. Mills Juanita.	11	76	J. W. Mills	Mahone Bay	13	172 20 205 80
111635	Latooka	11		A. V. Conrad	Parks Creek	17 13	176 20
107660	Lila D. Young	17	100	John B. Young	Lunenburg	18	213 20
107129 $103760$	Lilla B. Hirtle	11		Aubrey Anderson A. R. Morash Abraham Ernst	11	19	220 60 205 80
111634	Lillian	11	84 99	Abraham Ernst	Mahone Bay	17 18	213 20
111735	Lucania	9	99	Reuben Romkey	Kiverport	17	205 80
112112 $116523$	Maimie Dell	H	98	C. U. Mader Edmen Walters	Mahone Bay	17	205 80 194 40
116538	Mankato Maple Leaf	11	76 26	J. M. Rhodenizer	Lunenburg	6	70 40
116519	Marg't E. Schwartz		98	Wine C Consith		18	213 20
121998	Margaret S	11	63	John Schmeisser	E.M. La Have	16	63 00 196 40
121862 111709	Marina	11	78 100	A. V. Conrad Cyrus W. Parks		16 18	213 20
121855	Mariner Mary A. Duff	11		William Duff	Lunenburg	17	205 80
121859	Mary W. S	11	74	A. V. Conrad	rarks Oreek	14 18	177 60 213 20
121854 $107967$	Mattawa	11	96	E. F. Zwicker Elias Richard, sr	Getson's Point	21	235 40
121861	Medina A	11	74	Amiel Corkum	E. M. La Have.	17	199 80
121864	Millie Louise	11	54	William Richard Abraham Ernst	Getson's Point.	15 16	165 00 198 40
$\frac{121865}{107952}$	Minnie M. Cook	11	80 84	II. E. Backman	Riverport	16	198 40
116536	Minnie May	11	29	Ob mintion Coldont	l un on hunor	8	88 20
116503	Minnie Pearl	tt	97	William Thomas John B. Young	West Indian Pt.	17 15	205 80 191 00
111701 116535	Mizpah	11	100 85	J. Alex. Silver	I II	15	191 00
122007	Muriel M. Young.,	11	100	John B. Young	11	19	220 60
116530	Nahada	11	94	Howard Wynacht Thomas Knock	Kingshurg	17 3	205 80 32 20
112104 $116502$	Nina Oceanic	11	99	Reuben Ritcey	Lunenburg	17	205 80
112106	Oregon	11	99	Arthur Creaser	Riverport	17	205 80
$\frac{111642}{112113}$	Palatia	11	95 99	C. L. Silver. Daniel Lohnes	Riverport	17   17	205 80 205 80
121869	Parana		61	J. D. Sperry	Petite Kiviere		61 00
111402	Protector	tt - · ·	95	J. N. Rafuse	Conquerall Bank	21	235 40
111648	Riviera	11	96 99	Andrew Ross	Riverport	19	220 60 213 20
107125 $121856$	Roma Ronald G. Smith	# ·····	100	J. D. Myra. Wm. C. Smith J. N. Rafuse	Lunenburg	19	220 60
121991	Rupert	11	78	J. N. Rafuse	Conquerall Bank	17	203 80 54 00
122307	Sadie H		17	Percy Publicover C. U. Mader	Mahone Bay	5 15	191 00
$\frac{111741}{116529}$	Sargota	11	92 78	Adnah Burns	Dayspring	10	211, 20
107963	Shamrock	11	89	The compan Andorson	Lunenhuro	1.7	205 80 159 20
122303	Shannon	Halifay	63 15	James Bell	Dublin Shore	13	52 00
116746 111636	Spindrift Tasmania	Lunenburg	99	Wm. C. Smith	Lunenburg	17	205 80
111733	Transvaal	11	79	(1)	11	17	204 80 51 60
112114	Tribune	11	22 15	A. R. Morash Elijah Risser	La Have Islands	3	37 20
122306 107957	Undaunted Ungava		88	Www Cloversev	. r 16383111071116	21	235 40
	Uranus		0.0	Wm. C. Smith	Lunenburg	10 [	154 00

# List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

# LUNENBURG COUNTY-Concluded.

191868   Utowana   Lunenburg   71   J. N. Rafuse   Conquerall Bank   17   196   117143   116564   W. C. Silver   Lunenburg   97   Kenneth Silver.   Dayspring   20   228   111649   W. S. Wynot   100   C. U. Mader   Mahone Bay   17   265   112127   Yamaska   98   P. B. Zwicker   Mahone Bay   17   265   112127   Yamaska   98   P. B. Zwicker   14   188   1122000   Zoraya   16   John Spindler   Rose Bay   5   58   58   58   58   58   58								
121868	Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	or	Residence.	No. of Crew paid.	Amount of Bounty paid.
QUEEN'S COUNTY.   Pictou   2   30	117143 116504 111649 112127 111419	Valmore	Halifax	11 97	Eldridge Conrad Kenneth Silver C. U. Mader. P B. Zwicker. Elijah Ritcey	Up, Rose Bay Dayspring Mahone Bay Lunenburg	$egin{array}{c c} 4 \\ 20 \\ 17 \\ 14 \\ 18 \\ \end{array}$	\$ cts. 196 80 40 60 228 00 205 80 183 60 213 20 53 00
QUEEN'S COUNTY.			PIC	TOU	COUNTY.			
RICHMOND COUNTY.   Petit de Grat.   7   77   77   77   77   77   77   7	107330	Gertie M. Star	Halifax	16	Peter Roberts	Pictou	2	30 80
RICHMOND COUNTY.   Shelburne   14   Robert Williams   S. W. P. Mouton   5   51		<u>'</u>	QUE	EN'	S COUNTY.			
116657					Walter Fraser Robert Williams	Port Mouton S. W. P. Mouton	4 5	39 60 51 00
Titol   Annie B. M.			RICH	MO	ND COUNTY.			
111901   Lillian Louise.	116344 103463 111472 75561 72061 74100 96799 116343 116348 88599 117049 100161 111476 100490 122183 103469 111480 117992 107374 111907 72071 112877 72071 112877 116350 107995 10352 116345 122182 117099 116845	Annie B. M. Annie May Annie May Boreas C. P. M Candid. Catherine. Eva May Florence M Guide. H. C. Phillips Hilda Maud Indiana. Irene M. B Justina K. McKenzie Katie B. Lady Laurier Lesa of Gowrie. Leah Hardy Lena Jane Lillian Louise. Lizzie May Lumen Diei. Lilly May Maggie F Maggie M. F Maria A Mary Alice Mary J Mary M M Mary M M Mary M M Mary M M M M M M M M M M M M M M M M M M M	Arichat.  "Lunenburg Arichat.  "Halifax. Arichat.  "Barrington. Pt. Hawkesbury Arichat.  Lunenburg. Arichat.  "" "" "" "" "" "" "" "" "" "" "" "" "	18 11 17 41 22 23 17 11 16 63 88 11 11 66 10 17 16 12 14 20 11 12 20 11 12 12 12 12 13 13 13 14 15 16 16 17 18 18 19 19 19 19 19 19 19 19 19 19	Hilaire Sampson J. J. Langley Peter Landry J. A. Colford Alex. Burke Desiré Burke. Victor Poirier T. A. Boudrot Wm. J. Martell. Edward Poirier James Kehoe. J. D. Malcolm Thos. Hureau Frederick Poirier Isaiah Boudrot Wm. P. Groom John Burke S. A. Boudrot Joseph Petitpas. Peter Landry Dom. Boudrot C. P. Boudrot Alfred Boudrot Urban Sampson Amédée Poirier Patrick Fougere Daniel Paté John Walker P. E. Sampson Placide Burke Henry Sampson	Strait of Canso. Petit de Grat. Port Malcolm. River Bourgeois. Petit de Grat.  Goulet. Arichat. Descousse. River Bourgeois. River Bourgeois. Grand Grave. River Bourgeois. Petit de Grat. St. Peters. Petit de Grat. St. Peters. Petit de Grat. River Bourgeois. Petit de Grat. Basin R. I. Lardoise River Bourgeois.	15 12 4 8 2 15 2 4 5 3 4 6 6 4 4 4 5 6 6 2 3 3 3 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	77 80 62 40 25 80 54 00 63 20 66 40 67 40 61 40 60 105 20 33 20 177 00 24 80 64 40 60 41 60 55 00 52 00 55 00 32 20 02 20 65 50 0

List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

### RICHMOND COUNTY—Concluded.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
111907 111904 64018 85562 100231 92571 88504 117095 116889 92599 103460 100575 57662 111794 116292	Minnie A Minnie L Ocean Bride Oresa Pearl Primrose Quick Step Rodrid Grace Saint Dominique Swanhild Thistle Two Brothers Tyler Village Bride Volunteer Wilena Fraser.	Halifax.  Sydney. Arichat.  Sydney. Arichat.  Halifax. Pt. Hawkesbury	15 23 14 17 14 15 17 21 52 11 18 54 24 14	Hubert Birette	Petit de Grat Arichat. Port Malcolm. West Arichat. Petit de Grat Arichat. Lardoise. Petit de Grat River Bourgeois. Petit de Grat. Lardoise. River Bourgeois. River Bourgeois. River Bourgeois. River Bourgeois. Petit de Grat Petit de Grat	3 2 2 2 7 6 5 7 10 3 7	\$ cts. 134 80 37 20 37 80 28 80 31 80 65 80 65 80 54 00 72 80 136 20 33 20 69 80 150 20 38 80 58 40 35 20

### SHELBURNE COUNTY.

			1	1	
121808	AbbieBarrington.	10	Judah Cunningham Cape Sable Isl'd.	3	32 20
121802	Abbie May	10			24 80
116900	Abbie May Yarmouth	13			35 20
122096	Alfreda	ti		4	40 60
121801	Alfreda	10		4	39 60
122133	Alter C	10		4	39 60
100617	Alter C	28		8	87 20
122149	Alva	11		2	25 80
117134	Annie Lue			4	39 60
121890	Annie Smith			4	42 60
100612	ArdellaShelburne			4	39 60
116824	Avis Pauline Barrington			4	41 60
116818	Beatrice			4	41 60
122102	Bernice N Yarmouth			3	32 20
122453				4	41 60
116855	Blanche Shelburne	12		4	41 60
121806	Blanche	10		2	24 80
103186	Brittania Shelburne	11		6	55 40
121886	Carrie D Yarmouth		Thomas Duncan Clark's H'b'r	2	24 80
121654	Charles E	13		3	35 20
116826	Claremont A Barrington.	11	J. G. Nickerson Clark's H'b'r	4	40 60
121681	Claymore Yarmouth			4	29 60
121683	D. E. Nickerson			3	- 32 20
122462	Daniel S	10		3	32 20
121910	Defender Barrington.	] 53		12	141 80
107057	Dollie Verden	1.10		3	32 20
121791	Eddie C Yarmouth	10			32 20
116830	Edith Pauline Barrington.			1	17 40
122570	Edna M Yarmouth .			4	40 60
122470	Elva Bell	11		5	48 00
121884	Emma B	10		2	24 80
121909	Emmie G Barrington.	10		4	39 60
122235	Ena A	12		4	41 60 39 60
122467				4	52 00
107332	Estelle	15		5 5	
121688	Ethel May				47 00 24 80
122137	Etta M	10		2 3	32 20
121796	Etta VaughanShelburne	10		20	228 00
103795	Etta Vaughan Shelburne	98			24 80
122461	Eva E   Yarmouth ,	1 10	Moses Penney South Side	2	24 00

# LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

# SHELBURNE COUNTY—Continued.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
121901 117048 107054 121804 122106 122575 117045 121997 121997 121997 1212142 122468 116827 122468 122574 121797 121805 80799 122139 122139 122100 122232 122237 107060 90879 11687 117131 122454 121904 116853 116822 12131 121798 107080 100329 117136 117140 121889 94661 100329 117136 117140 121889 121890	Lena. Lila A Lottie G. Louise. Mabel C. Mabel Denvers Mabel L Mabel V Maple Leaf Mariana Mary J Mary May Matilda.	Yarmouth  "" Barrington Yarmouth Shelburne Barrington Yarmouth Barrington Yarmouth  "" Barrington Yarmouth Shelburne Yarmouth Shelburne Yarmouth Barrington Shelburne Yarmouth	11 11 128 10 10 10 12 12 11 11 12 10 10 10 10 10 10 10 10 10 10 10 11 11	Byron Swim. Foster Crowell P. E. Crowell P. E. Crowell P. E. Crowell P. E. Nickerson. H. H. Brannen. M. G. Smith. P. W. Nickerson. Nath. Crowell Samuel Hopkins Herbert R. Swim. C. A. Goreham. G. M. Forbes C. M. Wickens. B. L. Goodwin. J. C. Ross. Daniel Penney. Arthur Perry. Edward Nickerson. Dayson Kendrick. David Watkins. Nehemiah Crowell Floyd Ross. B. H. Smith P. E. Crowell G. L. Banks Wm. McMillan J. I. Madden S. S. Atwood. Whitman Ross. R. L. McCarthy T. A. Kenny J. A. Smith Leslie Smith. J. A. Crowell. Edmund Atkinson. Clifford Reynolds G. H. Smith Geo. A. Cox J. A. Newell K. T. Swåine Noah Abbott Millage Atkinson. O. T. Reynolds. Avert Smith. H. H. Atkinson Vincent Brannen. Dason Langthorn. Angus Nickerson J. H. Reynolds. Harry Banks D. V. Smith H. A. Penney Austin Swansburg Clifford Atwood A. J. Firth Stillman Perry. Cyrus Nickerson.	Barrington. Clark's Hbr. West Head. Stoney Island. West Head. Clam Point. Clark's Hbr. Lockeport. Woods Hbr. Forbes Point. Shag Hbr. N. E. Point. Up.Port La Tour South Side. N. W. Harbour. Hawk Shag Hbr. Atwood's Brook. Woods Hbr. Stoney Island. West Head Barrington Pas. Lockeport. Port La Tour Oak Park. Stoney Island. Shelburne. Clark's Hbr. Port La Tour Baccaro. Clark's Hbr. West Head Baccaro. Clark's Hbr. Shelburne Newellton Blanche Forbes Point. Clark's Hbr. Shelburne Newellton Stoney Island. Woods Hbr. Clark's Harbour Stoney Island. Woods Hbr. C. Woods Hbr. Co. Woo	5 4 8 4 4 3 3 3 3 4 4 3 3 3 3 4 4 3 3 3 3	\$ cts. 48 00 40 60 87 20 39 60 32 20 39 60 41 60 39 60 31 20 33 20 30 20 30 60 31 20 31 20 31 20 32 20 31 60 32 20 31 60 32 20 31 60 32 20 33 20 34 90 47 00 37 20 38 20 38 20 38 20 39 60 39 60 39 60 39 60 39 60 39 60 39 60 39 60 39 60 39 60
$   \begin{array}{r}     103057 \\     122234 \\     122231   \end{array} $	Mayflower Minnie Laura	. Yarmouth	12	Albert Crowell Joseph Brown	. Locképort Clark's Harbou	. 5	49 00 33 20 42 60

# List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con. SHELBURNE COUNTY—Con.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
121905 121687 121794 122103 103800 122457 117132 122136 121689 122104 122451 117050 121893 121682 121881 122233 122469 107059 122466 117044 122108 103783 116860 90648 117139 122236 116895 90894 122091 117046 116825 11644 121875 122107 121699 121894 122452 77744 117042 122150 122464	Seaton L Seretha. Springwood. Stella. Stranger Thalia D Thelma B Thelma E Theresa Thistle. Three Brothers Three Sisters Togo Toronto. Two Sisters. Una. Vice Reine.	Shelburne Yarmouth  Barrington Shelburne Yarmouth Barrington Yarmouth Shelburne Yarmouth Shelburne Yarmouth Barrington Yarmouth Shelburne Yarmouth Barrington Yarmouth	14 10 10 10 10 10 11 10 11 10 11 10 11 11	Knowles Thomas J. C. Brannen Edgar Adams Alex. Phillips Allan Atkinson. Robert Lowe Herbert Swim Hugh McAlpine R. C. Maxwell Alex. Phillips Isaiah Newell. R. L. Newell. T. E. Worthen L. J. Nickerson M. G. Nickerson Nehemiah Smith, Jr Samuel Atkinson William McMillan Churchill Locke L. J. Penney Andrew Duncan B. F. Cunningham E. W. Perry D. E. Cunningham R. H. Brannen. T. J. Newell Wallace Penney E. C. Locke B. C. Smith Bert Chetwynd Randall McKinnon P. W. Penney Wm. E. Atkinson Howard Chetwynd Daniel Nickerson Durkee Chetwynd Durkee Chetwynd Foster Salisbury	Clark's Harbour. West Head Barrington	3 3 4 18 4 4 3 4 2 3 4 3 4 2 5 3 2 4	32 20 39 60 213 20 39 60 213 20 40 60 39 60 25 80 32 20 39 60 27 80 30 80 41 60 32 20 39 60 41 60 41 60 32 20 220 60 195 40 41 60 32 20 40 60 42 60 33 20 39 60 41 60 42 60 33 20 40 60 41 60 42 60 43 60 43 60 43 60 43 60
103183 $116449$	WrenZenhyr	Shelburne	$\begin{array}{c} 22 \\ 11 \end{array}$	A. P. Hamilton Samuel Greenwood	Carleton Village Port Saxon	4	44 20 40 60
121656	Zilpha	Yarmouth	10 10	Martin Penney	South Side	3	32 20
	(		OKI	1			
117028 112388 112115 117030 122130 107377 107355 117026 100444 117029	Anna F. Annie Amelia Evangeline Gertrude W. Julia F. C. Maggie Ella Mary E. *Mary E. Stella May Two Brothers	" " " " Canso	14 13 10 16 12 11 10 16 12 17	J. G. Brewer Matth-w Hawley. J. J. Hines. C. J. Williams. T. A. Young. W. T. Donovan. Allan McIntyre. Avery Daisley. S. P. Hawley. Vincent Williams.	Ingonish Ferry	3 5	58 40 50 00 32 20 53 00 49 00 48 00 39 60 30 20 49 00 54 00

<sup>\*\*</sup> For 1906.

# List of Vessels which received Fishing Bounty, &c.—Nova Scotia—Con.

# YARMOUTH COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ ets.
121876 116898 112287 107344 122093 111879 121652 121698 121685 122109 103187 122573	Adoriam. Agnes M Alda Amanda Anita. Annie B Arabia Argo Argo Bella Bella Ben Bolt Bohemia	Digby Yarmouth	15 11 11 15 11 20 10 10 10 11 18 91 10	A. G. LeBlanc. Isiah Doucette Bruce McCormack Luxime D'Entremont. Augustus Bourque Theo. D'Enfremont. E. J. LeBlanc J. C. Clements. Augustin LeBlanc L. D. Boudreau William Pothier Henry Lewis. W. F. Doucette.	Tusket Wedge. Yarmouth West Pubnico Sluice Point West Pubnico Tusket Wedge Comeau's Hill M. E. Pubnico Tusket Wedge	4 6 4 2 8 3 1 3	44 60 40 60 55 40 44 60 25 80 79 20 32 20 32 20 17 40 33 20 55 00 176 20 24 80
107053	Bonnie Lin	11	10	Eugar Lanuers	Bandiord	. 4	24 80
107346 122145 116652 111836 121694	Caddie Cerita Champion. Chevalier Columbia	Digby	10 10 29 11 10	J. E. Perry. J. C. Doucette. J. A. Crocker. W. S. Sollows N. S. Boudreau.	Tusket Wedge Yarmouth Pt. Maitland	10 4	32 20 32 20 103 00 40 60 32 20
121882	Dorothy	11	10	L. H. Smith	Yarmouth	2	24 80
116205 121800	Eddie James Edessa		79	David D'Entremont George Michael	West Pubnico	19	219 60 22 40
122572	Eva		12	Thomas Amiro	IM. E. Pubnico	. 2	26 80
121883 122095	Fanny Rose	11	15 16	Mande Pothier	Tusket Wedge	6	59 40 38 <b>2</b> 0
121874	Finettie May	11	12	R. B. Wyman J. A. Crocker. Nar. Boudreau Eugene Harris.	Yarmouth	5	49 00
$\frac{122146}{94972}$	Flirt	0	16 19	Nar. Boudreau	Tusket Wedge	3 5	38 20 56 00
121877	Florence C	0	15	J. A. Surette	Pinkney Point.	5	52 00
$\frac{121872}{116207}$	Francis A	0	93	Judah Kenny	Rockville	21	235 40 68 80
111876	Geneva May	11	72	J. A. Surette. D. A. D'Entremont. Judah Kenny Leander Amiro. Henry Lewis. T. E. Smith. Alex. Boudreau A. W. Smith. N. J. B. Tooker A. C. D'Entremont. Bradford Lowe	L. E. Pubnico	17	197 80
90885 122092	Georgiana Georgie N. Smith	11	90	T. E. Smith	Yarmoutn	$\frac{21}{5}$	235 40 50 00
117137 107342	Glorianna Harry C. Ellis		10	Alex. Boudreau	Tusket Wedge	1 5	17 40 53 00
116743	Hattie D	11	$\begin{array}{c} 16 \\ 62 \end{array}$	N. J. B. Tooker	i armouth	16	180 40
103717 116894	Henry L Henry M. Johnson.	"	10 14	A. C. D'Entremont	West Pubnico	3	32 20 21 40
122099	Hilda	11	17	James Boudreau	Tusket Wedge	4	46 60
121655 $121795$	Indianna John L	11	10 11	M. D. Boudreau F. L. Pothier	14	7	24 80 25 80
116204	Laurie J	11	65	E. J. D'Entremont	West Pubnico	18	198 20
$\begin{array}{c} 122459 \\ 122455 \end{array}$	Lena A Lizzie A	11	11 33	J. W. Flemmings E. M. D'Entremont	West Pubnico	$\frac{3}{12}$	33 20 121 80
103709	Lizzie E	11	19	H. J. Killis	Pt. Maitland	5	56 00
103718 116899	Lucy Lydia L	11	10 14	A. F. D'Entremont Norman LeBlanc	Plymouth	5	47 00 51 00
121903 116658	Lydia L	Barrington	15	John Surette Eben Frost	Lower Argyle	6	29 80
107605	Mabel M	Weymouth	15 20	Lyman Sollows.	Pt. Maitland	5	59 40 57 00
$\frac{121691}{103712}$	Maccabee	Varmouth.	10	Joseph Atkins	Darling Lake	3	32 20 39 60
107337	Marguerite	11	57	Joseph Atkins. Hypolite Surette. L. P. D'Entremont	West Pubnico	17	182 80
111525 111875	Mildred P Nelson A	tt	11 72	Hugh McManus C. L. D'Entremont	Yarmouth	13	33 20 168 20
103706	Regine	D: 11	10	T. A. D'Entremont	Pubnico	4	39 60
111521 121653	Royal	Yarmouth.	10 10	Cereno Johnson Geo. Boudreau	Yarmouth Tusket Wedge	3	39 60 32 20
88589	Royal	11	20	Geo. Boudreau	Yarmouth	3	42 20
121878	Selma	11	14	Leo Cotreau	lusket Wedge	1	21 40

List of Vessels which received Fishing Bounty, &c.—Nova Scotia.—Concluded.

# YARMOUTH COUNTY—Concluded.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of owner or Managing Owner,	Residence.	No. of Crew paid.	Amount of Bounty paid.
116656 100313 121660 122135 116893 117138 122134 121659	Silver Spray. Souvenir. Squanto. 10 U. 8. Togo. Two Brothers	St. John.	11 71 11 16 12 11 10 10 16 19	M. A. Surette C. O. Nickerson. S. D. D'Entremont. Alex. Surette. Wilson Rankin. Leander Amiro J. L. Surette. Louis Surette. Joshua LeBlanc. Samuel Surette. Alexander Shaw Frank Harris.	Yarmouth West Pubnico Tusket Wedge. Arcadia L. E. Pubnico Pinkney Point Tusket Wedge.  Surette Island Sandford	5 20 4 3 4 3 2 5	\$ cts. 235 40 48 00 219 00 40 60 38 20 34 20 40 60 32 20 24 80 53 00 48 60 33 20

### PROVINCE OF NEW BRUNSWICK.

### CHARLOTTE COUNTY.

107913	Arnold B St. Andrews	. 1	H. H. Cheney	White Head	2	24 80
107603	Augusta Evalun	3		North Head	5	68 00
94727	Augusta Evelyn St. John				3	44 20
83469	Austin P St. Andrews	1			2	26 80
107903						54 00
122250	Ava M	1		Seeley's Cove	3	37 20
111503	Bonita St. John	1			3	34 20
116969	Cassie Bell. St. Andrews	1		White Head	2	28 80
88253	E. B. Colwell St. John			Beaver Harbour.	4	48 60
103114	Edward MorseSt. Andrews			Campobello	4	61 60
103789	Effie B. Nickerson. Shelburne			North Head	2	36 80
111522	ElizabethDigby			Woodw'rd'sCove		50 60
80882	Ella Mabel St. Andrews				1	21 40
116675					$\frac{1}{2}$	29 80
80803	Evangeline Windsor	11			6	62 40
100535	Fair Play Yarmouth	1		Black's Harbour	1	18 40
103120	Falmouth St. Andrews				4	39 60
111552	Flora B				4	42 60
116968	Florence	18		Beaver Harbour	4	47 60
122247	Frances L	1		White Head	2	25 80
97146	Florence	10		Two Islands	3	32 20
107910	Grace & Ethel	10		Woodw'rd'sCove		45 60
111839	Harry C Digby	10		Letete	3	38 20
122248	Hattie B St. Andrews	$\tilde{1}$		Seal Cove	4	39 60
107437	Hattie L	19		"	4	41 60
83463		33		Campobello	1	40 40
122590	Helen and Beatrice	29		ÎII	5	66 00
122244	Hilda E		Jos. Morehouse	White Head	2	26 80
	Hilda E	31	James Nesbitt	North Head	7	82 80
	Jessie James	11	Josephine Frankland.	White Head	3	33 20
59321	Little Nell	2		Campobello	1	28 40
122042	Lyla H	11		White Head	4	40 60
107438	Minnie F	11	Wm. Guptill	Seal Cove	3	33 20
88402	Lyla H       "         Minnie F       "         Mizpah       Digby	53	J. E. Gaskill	Grand Manan		53 00
103705	Nebula Yarmouth	2	Nathaniel Beal	North Head	6	68 40
122044	Olive C St. Andrews	23	Thomas Carter	Seeley's Cove	4	54 60
112311	Oronhyatekha	21	Jas. McLeese	Back Bay	5	58 00
92518	Oronhyatekha St. Andrews	18			2	32 80
103993	Pythian Knight	19		North Head	3	41 20
107806	Pythian Knight Rena F	12	John Ingersoll	Woodward'sC've	3	34 20

# List of Vessels which received Fishing Bounty, &c.—New Brunswick—Con.

# CHARLOTTE COUNTY—Concluded.

Official Number.	Name of Vessel.	Port- of Registry.	Tonnage.	Name of Owner Or Managing Owner.	Residence.	No. of Orew paid.	Amount of Bounty paid.
107433 116964 107440 88414 103998	Sir John	St. John St. Andrews Digby St. Andrews	11 20 12 20 15 16 12 11 16	Hiram Morse	Leonardville Woodward'sC've Beaver H'b'r Woodward'sC've Grand Manan White Head Letete Seal Cove	3 2 4 2 3 4 2 3 4	\$ cts.  36 20 33 20 34 80 41 60 34 80 37 20 45 60 26 80 33 20 45 60 34 20

### CLOUCESTER COUNTY.

72099	Adelina	Chatham	12	Clamant Tantainna	r	~	40.00
	Adeline Gladys		12	Clement Lanteigne	Lameque	5	49 00
103081	Albatross			P. D. Blanchard		4	41 60
112156	Albert W	* * * * *	13	Wm. Fruing & Co		5	50 00
122057	Alico	* * * 2.00 * *	10	Philorome Chiasson		4	39 60
97194	Alice		15	Severe Duguay	Lit. Lameque	5	52 00
	Alika	* ( * * * * *	12	Lange Paulin]	Lameque	5	49 00
	Alma		12	Agapit Duguay	44	5	49 00
103763	Alouette	44	10	Wm. Fruing & Co	Caraquet	4	39 60
92419	Anna.	11	12	J. A. Chiasson	Lamegne	5	49 00
100960	Annie M	44	11	W. S. Loggie Co	Chatham	4	40 60
96739	Argeline	44	14	Germain Lanteigne (	Caraquet.	$\bar{6}$	58 40
103085	Argentina		12	C. Robin, Collas Co	11	4	41 60
100983	Bee	41	10	James Doucet	11	3	32 20
103072 +	Ben Hur	11	11	John Leclerc		.5	48 00
100975	Big Bear	44	10	F.T.B. Young	"	4	39 60
116474	Blanchard	11	12	Michael John		-	41 60
100299	Blanchard	11	12	C. Robin, Collas Co		4	
103589	Blenheim	11	13	C. Robin, Collas Co		3	34 20
103780	Britannia	44	13	Was Essies & Co		4	42 60
100780	Britannic	11	12	Wm. Fruing & Co		4	42 60
	C. R. C			W. S. Loggie Co	hatham.	4	41 60
100908	Caesar	****	13	C. Rohin, Collas Co		4	42 60
	Colie		10	Philip Rive		4	39 60
	Celia		11	P. J. Frigot	11	4	40 60
100784	Cerdric		14	Philip Rive	11	3	36 20
	Charlotte	ii	13	F. T. B. Young.	11	3	35 20
100789	Chazalie	11	11	41	11	3	33 20
96730	Christina		11	C. Robin, Collas Co	11	4	40 60
101000	Condor		10	Wm. Fruing & Co	11	5	47 00
103083	Corsair	11	10	. 11		3	32 20
100971	Cyprian	88	10	J. O. LeBouthillier	11	5	47 00
100913	Daffodil	н	10	Wm. Fruing & Co	44	4	39 60
100915	Dawn		12	C. Robin, Collas Co		4	41 60
103076	Dipper	н '	12	W. S. Loggie Co C	hatham	4	41 60
103948	Dora	11	12	C. Robin, Collas Co	argonet	4	41 60
112155	Dora	11	10	Seraphin Doiron	Iiscou	3	32 20
122053 1	Dorie	11	10	Fabien Chiasson, Jr I	Mand Pirron	5	
100999 ]	Dove	11	11	Wm. Fruing & Co	Sand Hiver		47 00
100998	Eagle	11	10			4	40 60
116979   1	Elie Anne		17	Tog I Dainen	11	3	32 20
103590	Eliza		13	Jos. J. Doiron	44	4	46 60
100293	Eliza			C. Robin, Collas Co		4	42 60
	Emma	8.6 6.7 7	15	F. T. B. Young Sydney DesBrisay		4	44 60
	Emperer	Chatham	19	Sydney Des Brisay I	etit Rocher	1	26 40
	Emperor	onatham	10	Wm. Fruing & Co C	Caraquet	3	32 20
	Empress		12			3	34 20
100110 .1	Esk	11	14	41		4	43 60

# List of Vessels which received Fishing Bounty, &c.—New Brunswick.—Con.

# GLOUCESTER COUNTY—Continued.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ ets.
100772	Estelle	Chatham	13	Philip Rive	Caraquet	3	35 20
100787 122058	Ethel Evangeline		11 10	F. T. B. Young Vilas Frigault	Mizzonette	4	40 60 39 60
100905	Evangeline		10	P. A. Lanteigne	Caraquet	4	39 60
92417	Evangeline		11	Vilas Frigault. P. A. Lanteigne Maximin Paulin Wm. Fruing & Co Geo. G. Mallet. F. T. B. Young	L. Lamaque	5	48 00
103001 103077	Falcon	0	10	Wm. Fruing & Co	Caraquet	4 4	39 60 39 60
121900	Fame	Shelburne	$\frac{10}{79}$	F. T. B. Voung	Caraquet	6	123 40
100298	Fisher	Chatham	12	Hubert Paulin	L. Lamaque	5	49 00
61445	Flavie	11	13	Geo. G. Mallet. F. T. B. Young. Hubert Paulin. Wm. Fruing & Co	Caraquet	3 4	35 20 43 60
111468 112165	Fleetwing	11	14 13	John Robichaud C. Robin, Collas Co F. T. B. Young Prospere Boudreau	Shippegan	5	50 00
112151	Flying Foam	11	18	C. Robin, Collas Co	Caraquet	4	47 60
100782	riying roam		12	F. T. B. Young	Mizzonotto	3	41 60 32 20
116479 111467	Fortuna Four Brothers	11	10 13	Henri Albert	Caraquet	4	42 60
100778	Gambetta	11	13	Henri Albert. W. S. Loggie Co C. Robin, Collas Co W. S. Loggie Co	Chatham	4	42 60
111464	Gazelle	11	13	C. Robin, Collas Co	Chatham	5 5	50 00 47 00
100954 100968	Gazelle		10 11	W. S. Loggie Co C. Robin, Collas Co	Caraquet	3	33 20
96733	Gem	11	12	Wm. Fruing Co Theotime Poirier	11	3	34 20
103766	Genesta			Wm. Fruing Co Theotime Poirier Gilbert Duguay Wm. Fruing & Co.	I. Lamaqua	4	41 60 44 60
116980 111848	Georgia		15 15	Wm. Fruing & Co	Caraquet	4	44 60
103086	Gipsy	11	20	Gilbert Duguay Wm. Fruing & Co W. S. Loggie Co	Chatham	5	57 00
100964	Gladstone	11	10	Isaie Lanteigne	Caraquet	4 4	39 60 42 60
100910 107775	GleanerGoldseeker	11	13 13	C. Robin, Collas Co	11	3	35 20
122491	Good Intent	11	10	Luke Lanteigne. C. Robin, Collas Co. Jas. W. Nixon Philip Rive. Gustave Chenard. F. T. B. Young. H. Le Boutillier, jr.	11	3	32 20
112157	Grasshopper		16	Philip Rive	11	5 4	53 00 41 60
92418 100790	Grip Guiding Star	11	12	F. T. B. Young.	11	1	18 40
111849	Happy Home		16	H. Le Boutillier, jr Philias Mallet P. M. Lanteigne	07.	4	45 60
100956	Harold N	11	12	Philias Mallet	Shippegan	5 4	49 00 39 60
$\frac{100994}{107771}$	Hercules	11	10 13				35 20
103765	Hirondelle	H	11	Agapit Leclerc	tt	4	40 60
61425	Hirondelle Hope Hope	New Carlisle	13	P. M. Lanteigne		4	42 60 47 60
92409 100903	Hope.	Chathain	18 12	Agapit Leclerc P. M. Lanteigne Philip Rive F. T. B. Young Chas. Rail	11	$\hat{2}$	26 80
103939	Hope		11	Chas. Rail	Lameque	3	40 60 32 20
100906 117181	Hotspur		10 16	Philip Rive. Jos. J. Savoy Wm. Fruing & Co.	Lameque	5	53 00
103931	Ida	11	12	Wm. Fruing & Co	Caraquet	3	34 20
96724	Irene Isabel Jersey Lily John B Josephine	11	11	J. B. Hebert	H	5	48 00 41 60
103289 100958	Jersey Lily	0	12 11	Wm. Fruing & Co	Chatham	4	40 60
100955	Josephine	11	11	Philip Rive	Caraquet	3	33 20
116509	Masaga	Lunemburg	59	F. T. B. Young Wm. Fruing & Co C. Robin, Collas Co		4	59 00 44 60
112169	Kathleen	Chatham	15 14	C Robin Collas Co	11	3	36 20
103949	King Edward Kingfisher	11	13	Will. Fruing & Co	" " " " " " " " " " " " " " " " " " " "	3	35 20
103288	Kite	11	10	Patrick Lanteigne	11		39 60 36 20
107774 103283	Klondyke Koh-i-noor	11	14	C. Robin, Collas Co	11		35 20
111461	Ladysmith	11		Philip Rive	L. Lameque	5 4	54 00 39 60
103003	Lark	11	4.0	Wm. Fruing & Co	Caraquet	5	52 00
107773 $122059$	L'Etoile Letta Jane	11	15 15	Prudent Gallien John McWard C. Robin Collas Co F. T. B. Young	Miscou	5	52 00
112152	Lillian	11	15	C. Robin Collas Co	Caraquet	3 2	37 20 25 80
100972	Lillian Lizzie D	11	11	F. T. B. Young	0	1 2	20 00

# List of Vessels which received Fishing Bounty, &c.—New Brunswick—Con.

### GLOUCESTER COUNTY—Continued.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Pounty paid.
							\$ cts.
116977 116480 100955 112158 116978 112168 1107779 72100 103278 117182 100292 100295 116471 111847 103084 92413	Mabel. Maggie. Majestic Maple Leaf Margaret Margaret Ann. Marie Marie Celia. Marie Etoile Marie Joseph Marie Louise Mary Emma. Mary Jane Mary Jane Mary O		10 10 13 16 13 15 11 13 20 12 18 10 14 11	W. S. Loggie Co. John Paulin. W. S. Loggie Co. Wm. Fruing & Co W. S. Loggie Co. John James. Gaspard Savoie. Eugene Gauvin. C. Robin, Collas Co. J. A. Doiron. Lazare Gauvin. J. A. Paulin. Gustave Chiasson. David Albert. Wm. Fruing & Co. P. C. Doiron. J. O. Cormier. W. S. Loggie Co William Cormier. H. Le Bouthillier. sr.	Caraquet. Chatham Caraquet. Chatham L. Lameque Shippegan Lameque, Caraquet L. Lameque Caraquet	2 4 4 5 5 4 4 5 5 4 4	53 00 24 80 39 60 42 60 53 00 50 00 44 60 57 00 49 00 47 60 33 20 51 00 40 60
100957 116475	Mary R Mary Rose	tt	12 17	W. S. Loggie Co William Cormier	Chatham Caraquet	5 5	49 00 54 00
112161 111844 112150 116477	Mary O. Mary R. Mary Rose. Mary Star Mary Star of the Sea Mary Star of the Sea Mary Starof the Sea	11 11	14 15	H. Le Bouthillier, sr C. Robin, Collas Co Luke Friolet Ferdinand Savoy	11	4 4 6 4	44 60 43 60 59 40 49 60
$\frac{103768}{111462}$	Mayflower	11	13 10	C. Robin, Collas Co Geo. Vibert. R. J. Noel.	Caraquet	3 4	35 20 39 60
$   \begin{array}{c}     107777 \\     100779 \\     112164   \end{array} $	May Flower Mermaid Merry Christmas	11	11 11 13	W. S. Loggie Co Celestin Jean	Chatham Lameque	5 5 5	48 00 48 00 50 00
100300 117188	Mikado Morning Star		13 14	C. Robin, Collas Co Romain Noel	Caraquet Lameque	5	42 60 51 00
88669 122055 122052	Morning Star Olive Opal	11 11	12 14 10	Gustave Gionet Amede Duguay. Pierre Chiasson	L. Lameque	5 5	26 80 51 00 47 00
103004 $103005$	OrioleOsprey	11	11 10	Wm. Fruing & Co	Caraquet	4 4	40 60 39 60
100904 100297	P. T. S. Palma	11		Hugh LanteigneA. F. AchéPhilip Rive.	Lameque	4	40 60 43 60
100776 103778	Patrick Pelican	11	77 -4	Philip Rive	Caraquet	3 4	33 20 42 60
103764 116974	Petrel Providence	11	12 18	Michel Lanteigne.	. 11	3 4	34 20 47 60
$96740 \\ 96732$	Providence	11	13 11	Michel Lanteigne.  Michel Lanteigne.  T. Le Bouthillier  Wm. Fruing & Co.  Philip Rive.	11	4 4	$\frac{42}{40} \frac{60}{60}$
100775 103586	Red Gauntlet	11	11 17	Philip Rive	Chatham	5	40 60 54 00
$\frac{100952}{103078}$	Replevin	11	10 13	bames De Chace	DIHPPERALL	3 4	$\frac{32}{42} \frac{20}{60}$
97191 111470	Rita River Branch	tt	12 11	C. Robin, Collas Co	Caraquet	4 3	41 60 33 20
103946 103587	Robin	0	12 19	C. Robin, Collas Co W. S. Loggie Co Fabien O. Aché	Chatham	5	41 60 56 00
92404 100908	Rosalie	11	10	r mmb roise	Caraquet	3	$\frac{46}{32} \frac{60}{20}$
$\frac{100773}{116972}$	RupertSt. André	11	12 15	André A. Aché	Lameque	3 4	34 20 44 60
111469 112167	St. John	H	13 10	John Aché Raphael Gionet	Caraguet	4 4	42 60 39 60
$\frac{103008}{107776}$	St. Joseph St. Peter	11	12	Adolphe Ache	Lameque	5 4	49 00 41 60
116473 117187	Ste. Anne	tt	14	Onesime Chiasson Jean P. Noel	11	4 4	43 60 42 60

List of Vessels which received Fishing Bounty, &c.—New Brunswick—Con.

# GLOUCESTER COUNTY—Concluded.

Official Number.	, Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ ets
117189 122051 74401 100907 103010 117190 103584 100953 100914 100901 100966 100768 122060 100963 103767 122056 111845 103772 103947 103762 100986 100777 96738 117184 100918 112159 103285 103775 117183 100996	Ste. Cecelia. Ste. Julie. Sara Sarah. Sarah B. Saturn Saxon. Sea Bird. Sea Flower. Sea'r Flower Sea Foam. Sea Star. Silver Moon Sir Charles. Spark. Stanley. Stanley. Stella Maris. Sunbeam Superior Surprise. Swallow Swan. Swift. Teutonic Three Brothers Tickler United Empire Victoria. Vina. Voltaire. Von Moltke			Marguerite Noel. William Doucet. F. T. B. Young. A. S. Lanteigne. Dom. Blanchard. Philip Rive. W. S. Loggie Co. C. Robin, Collas Co. F. T. B. Young. J. B. Sewell. Joseph Savoy. W. S. Loggie Co. F. T. B. Young. Wm. Fruing & Co. A. D. Gionet. Adam Silva, sr. C. Robin, Collas Co. C. Robin, Collas Co. C. Robin, Collas Co. Lasie Godin. C. Robin, Collas Co. Loggie Co. J. S. Albert. Docithé Chiasson. C. Robin, Collas Co. J. S. Albert. Docithé Chiasson. C. Robin, Collas Co. J. S. Albert. Docithé Chiasson. C. Robin, Collas Co. J. S. Albert. Docithé Chiasson. Philip Rive. W. S. Loggie Co. Jacques Noel. P. M. Lanteigne. P. J. Frigat.	Shippegan. Chatham. Caraquet.  "Miscou. Caraquet.  "Mizzonette. Caraquet.  "Island River. Chatham. Caraquet. Shippegan Isl'd. Caraquet.  "Chatham. Lameque. Caraquet.	5	\$ cts, 50 00 41 60 48 00 32 20 39 60 47 00 33 20 34 20 44 60 42 60 43 60 42 60 39 60 32 20 47 00 38 20 35 20 48 60 48 60 40 60 41 60 52 00 39 20 44 60 42 60 43 60 44 60 43 60 44 60 45 60 46 60 47 60 48 60 49 60 40 60 40 60 41 60 42 60 43 60 44 60 45 60 46 60 47 60 48 60 49 60 49 60 40 60
103588	Vulture	11	13	W. S. Loggie Co Eutrope Chiasson	Chatham	4	42 60
122054 100953 100973 103079 100920	White Fish White Wings World's Fair. Wren Zephyr	H	13 10 11 11 12	Eutrope Chiasson F. T. B. Young Wm. Fruing & Co C. Robin, Collas Co	Caraquet	5 3 3 3	50 00 32 20 33 20 33 20 34 20
		NORTHUM	BEI	RLAND COUNTY.			
100969 92420 122495	John Bull Mary Louise Victory		10 13 10	Honoré Albert Donald Loggie Luther Lewis, et al	Neguac Burnt Church Escuminac	3 3 2	32 20 35 20 24 80
		RESTIG	ouc	CHE COUNTY.			
94959	Winnie G. S	Lunenburg	26	Donald McGregor	Dalhousie	3	48 20
		ST. J	OH	N COUNTY.			
59388 116724 103704	Letitia		18	Mark Shannon J. L. Belding William Harkins	Chance Harbour	3 3 3	32 20 40 20 53 20

List of Vessels which received Fishing Bounty, &c.—Continued.

# PROVINCE OF PRINCE EDWARD ISLAND.

### KINGS COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
71302 116303 74141 71310 100445 116278 66679 75904 122086 75835 116308 122081 107759 122087 83097 100696 113022 107751 112378 116296 112125 96727 64869 122085 116750	Alice Bella Rose. Belle Black Watch Carrie O. Charlotte S Christie Belle Diploma Empress Florence. Four Brothers Francis D. Cook Frank Hustler Janet. Joseph Ann Marion Emerson Mianto aomah Minnie Laura Muriel O. L. B Olive S Outlook Pearl Ryse. Sarah L. Oxner Silver Spray Stella R Success	Yarmouth	10 21 21 23 12 14 13 62 26 14 26 14 26 14 27 30 72 31 21 17 21 14 13 14 14 15 16 16 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17	Mathew Rose. J. W. Jenkins. Pius Cheverie. Edward Colbert. Reuben Penny. Frank McDonald. John Dicks. John Gosbee. Lot Graham. Thomas Gosbee. Reuben Cohoon. J. M. Cheverie. Lauchlin McNeill. Wilfied Cheverie Joseph Dorion. Wallace White. Edward Dicks. Joseph White. Silas Sencabaugh Chas. Gillam. Alex. Jackson. Hugh Jackson. J. A. McKenzie. Wm. J. Poole Edward Delorie. Wm. Johnston.	Beach Point Georgetown. Beach Point Souris. Pt. Pleasant. Beach Point Souris. Georgetown. Montague. Souris.		\$ cts.  39 60 50 60 60 60 00 34 20 35 20 113 80 63 00 47 60 47 00 42 60 43 60 67 00 123 80 60 60 62 00 34 20 39 20 58 00 43 60 63 60 63 63 40 60 63 63 52 00 44 60

### PRINCE COUNTY.

107758   Daisy   Charlottetown   13   Daniel Fraser		36 John Agnew	5   50 00 6   80 40 4   47 60 10   138 00
---	--	---------------	--

### QUEENS COUNTY.

107763 Guinea	Lunenburg Charlottetown	20 19 13 18	J. H. McLeod Jonathan Delaney S. Pickering Frank Pidgeon	Sea View French River	4 3 3 4	41 20 35 20 47 60
---------------	-------------------------	----------------------	---	--------------------------	------------------	-------------------------

# List of Vessels which received Fishing Bounty, &c.—Concluded. PROVINCE OF QUEBEC.

### GASPE COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
88464 85400	Mary E. Minnie M. Minnie May. Shamrock Stella	Arichat	10 13 10 23 15	Timothé Larade Nectaire Boudreau Honoré Cormier Wm. Boudreau Alfred Vigneau Alibé Lafrance R. J. Leslie & Co	Amherst  Pointe Basse	4 4 4 5 4	\$ cts.  48 60 47 00 42 60 39 60 60 00 44 60 38 20
		SAGU	ENA	AY COUNTY.			

103060	Edith M	Quebec	20	Zoel Jomphe	Seven Islands	3	42 20
75445	Phoenix	Gaspe	28	Ulric Gagné	Caribou Islands.	2	42 80

# APPENDIX No. 2.

# EXPENDITURE AND REVENUE.

The total expenditure for all Fisheries services, except Civil Government, for the fiscal year ending 31st March, 1908, including Fishing Bounty, a mounted to \$956,196.23 being within the appropriation by over \$400,000.

The total net fisheries revenue, during the same period, for rents, license fees, fines and sales, including the *modus vivendi* licenses to United States vessels, amounted to \$91,574.

Service.	Expenditure.	Vote.
Fisheries Fish-breeding Fisheries protection service Fishing bounty Miscellaneous expenditure  Total	225,279 96 156,114 50 181,267 38	\$ cts 157,900 00 252,300 00 225,260 00 160,000 00 560,846 00 1,356,306 00

The details of the above will be found in the Auditor General's report under the proper headings.

In addition to the above, the following summary shows the salaries and disbursements of fishery officers in the several provinces, together with the expenses for maintenance of the different fish-breeding establishments throughout the Dominion.

	Service.	
		\$ ct
isheries	Ontario	4,857 2
11	OntarioQuebec	8,200 0
11	New Brunswick	36,445 8
11	Nova Scotia	45,241 5
- 11	Prince Edward Island	9,455 8
11	Manitoba	4,638 5
11	Alberta	5,440 6
11	Saskatchewan	7.277 4
11	British Columbia	31,954 8
11	Yukon	1,226 30
eneral a	ccount	3,135 9

# FISHERIES, 1907-08.

# The expenditure by provinces is subdivided as follows:—

	Amount.	Total.
Ontario.	\$ et.	\$ ets.
Salaries of officers	3,600 00	
Disbursements of officers	1,257 23	
Expenses, Special Guardians Miscellaneous.		
Total		4,857 23
Quebec.		
Salaries of officers	3,600 37	
Disbursements of officers	4,170 21	
Wages, Special Guardians Expenses, Special Guardians	418 00	
Miscellaneous.	11 44	
		0.000 06
Total		8,200 02
New Brunswick.	0.4.5	
Salaries of officers	6,445 00	
Disbursements of officers	9,659 94 18,490 41	
Wages, Special Guardians Expenses, Special Guardians	707 68	
Miscellaneous	1,142 85	
Total		36,445 88
Total		00,110 00
Nova Scotia.	0.000.99	
Salaries of officers	9,026 33 16,754 63	
Wages, Special Guardians	19,326 53	
Expenses, Special Guardians Miscellaneous		
Miscellaneous	134 01	
Total		45,241 50
Salaries of officers. Prince Edward Island.	3,150 00	
Disbursements of officers	2,205 36	
Wages, Special Guardians	4,000 57	
Expenses, Special Guardians	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
MISCERANEOUS	10 00	
Total		9,455-80
Manitoba.		
Salaries of officers	1,500 00	
Disbursements of officers	685 28 1,495 84	
Wages, Special Guardians	820 05	
Miscellaneous	137 34	
Total		4,638 51
2.0001		
Saskatchewan.		
Salaries of officers.	2,297 49	
Disbursements of officers	2,593 60	
Disbursements of officers	1,273 50	
Expenses, Special Guardians. Miscellaneous.	1,112 50	
Total		7,277 49

	Amount.	Total.
Salaries of officers.  Disbursements of officers.  Wages, Special Guardians Expenses, Special Guardians Miscellaneous.	\$ ets. 547 50 1,662 70 2,937 40 293 06	\$ cts.
Total		5,440 66
British Columbia.  Salaries of officers.  Disbursements of officers.  Wages, Special Guardians.  Expenses, Special Guardians  Miscellaneous.  Total	6,406 92 4,349 59 13,827 46 3,589 72 3,790 14	onsont on
Yukon.  Salaries of officers.  Disbursements of officers.  Wages, Special Guardians  Expenses, Special Guardians  Miscellaneous.		
Total		1,226 30
General account.		3,135 91
Grand total		157,874 13

# FISHERIES GENERAL EXPENDITURE—Continued.

### FISH-BREEDING.

	Expenditure.	Total.	
Annual Control of Annual Contr		\$ cts.	\$ cts
Fish-breeding,	Ottawa hatchery, Ontario	2,786 64	
11	Newcastle II II	3,934 30	
11	Sandwich " "	14,354 55	
11	Wiarton " "	5,031 63 910 38	
11	Quinte Bass Pond hatchery	910 99	27,017 50
11	Tadoussac hatchery, Quebec	5,273 41	21,011 00
11	Gaspé " "	2,097 61	
11	Magog " "	2,564 91	
tt '	St. Alexis " "	1,329 74	
11	Mont Tremblant	796 85	
11	Chelsea	126 59	
11	Lake Lester " "	1,435 98	19 605 00
11 ,	Restigouche hatchery, N. B.	4,987 77	13,625 09
11	Miramichi " "	10,588 49	
11	St. John River "	1,713 50	
11	Shemogue " "	2,192 35	
11	Shippegan " "	2,705 31	
11	St. John Pond " "	6,921 93	90 100 05
	Bedford hatchery, N. S	2,254 01	29,109 35
11	Margaree " " "	3,668 63	
"	Bay View u	2,875 58	
11	Canso	1,953 92	
11	Windsor " "	1,855 89	
tt	Fourchu " "	7,413 06	20.004.00
	Sollring hatchours Man	4,689 85	20,021 09
11	Selkirk hatchery, Man	7,909 19	
11	Winnipegosis	12,684 42	
			25,283 46
11	Fraser River hatchery, B.C	8,137 09	,
H.	Granite Creek " "	7,928 52	
11	Skeena " "	6,910 34	
17	Babine	24,997 01	
11	Pemberton " "	10,970 95	
11	Harrison Lake " " " Rivers Inlet " "	10,777 35 7,338 76	
99 81	Stuart Lake	27,005 12	
*1	11 11 11 11 11 11 11 11 11 11 11 11 11		104,065 14
tt	Kelley's Pond hatchery, P.E., Id	2,011 57	
tt	Charlottetown " "	2,135 06	4 140 00
G 3		19 909 00	4,146 63
General accou	nt	12,392 00	12,392 00
			235,660 26
			2

# FISHERIES GENERAL EXPENDITURE—Continued.

# FISH-BREEDING-Continued.

SALARIES, ETC.	\$ cts.	\$ cts.
General Account—		
Salaries Miscellaneous	5,353 00	
Total	7,039 00	
		12,392 00
Babine hatchery—		
Salaries Miscellaneous expenditure.	. 833 33 24,163 68	
Total		24,997 01.
Salaries	000 54	21,007 01.
Miscellaneous	7,174 58	
Total		8,137 09
Salaries	004 00	0,10, 05
Miscenaneous	6,936 84	
Total		7,928 52
Salaries	1 000 00	.,020 02
Miscellaneous.	9,577 35	
Pemberton hatchery—		10,777 35
Salaries	1,100 00	,,,,
Miscellaneous.	9,870 95	
Total River's Inlet hatchery—	• * • • • • • • • • • • • • • • • • • •	10,970 95
Salaries	1,012 49	d
retiscensificous	6,326 27	
Totalkeena River hatchery—		7,338 76
Salaries	1,295 00	
Miscenaneous	5,615 34	
Totaltuart Lake hatchery—		6,910 34
Salaries	1,075 00	
Miscellaneous	25,930 12	
Total		27,005 12:
Berens River hatchery—		
Salaries		
ruscenaneous	7,909 19	
Totalelkirk hatchery—		7,909 19
Salaries	1,200 00	
Miscellaneous	3,489 85	
Total		4,689 85
Salaries		
Miscellaneous.	12,684 42	
Total		12,684 42
iramichi hatchery—		
Salaries	1,000 00	
Miscellaneous	9,588 49	
Total		10,588 49

# FISHERIES GENERAL EXPENDITURE—Continued.

### FISH-BREEDING—Continued.

SALARIES, ETC.—Continued.	\$ cts.	\$ ets
New Brunswick—Continued.		
Restigouche hatchery— Salaries Miscellaneous	1,108 34 3,879 43	
Total Shippegan hatchery Salaries		4,987 77
Miscellaneous	2,705 31	
Total Shemogue hatchery— Salaries		2,705 31
Miscellaneous		2,192 35
St. John's Pond Salaries Miscellaneous	6,921 93	2,102 00
Total	0,921 93	6,921 93
St. John's River hatchery— Salaries Miscellaneous	940 00 773 50	
Total		1,713 50
Nova Scotia.  Bay View hatchery— Salaries Miscellaneous	2,875 58	
Total Bedford hatchery— Salaries		2,875 58
Miscellaneous	1,500 00 754 01	2 274 24
Total Canso hatchery— Salaries		2,254 01
Miscellaneous.  Total	1,953 92	1,953 92
Fourchu Pond hatchery— Salaries Miscellaneous	7,413 06	
Total		7,413 06
Salaries Miscellaneous	2,748 63	
Total	800 00	3,668 63
Miscellaneous Total	1,055 89	1,855 89
Ontario.		_, 500 30
Newcastle hatchery— Salaries Miscellaneous	1,481 50 2,452 80	
Total		3,934 30
Salaries Miscellaneous	1,682 00 1,104 64	
Total		2,786 64

# ${\bf FISHERIES} \ {\bf GENERAL} \ {\bf EXPENDITURE} - {\it Continued}.$

# FISH-BREEDING—Continued.

	\$ cts.	\$ ets
Quinte Pond— Ontario—Continued.		
Salaries Miscellaneous	125 00 785 38	
Total Sandwich hatchery— Salaries Misselle	7 050 00	910 38
Miscellaneous		
Total	4 00% 00	14,354 55
Miscenaneous	3,636 -63	
Total		5,031 63
Charlottetown hatchery— Salaries Misceller		
Miscenaneous	2,135 06	
Kelly's Pond—		2,135 06
Šalaries Miscellaneous	950 00 <b>1,</b> 061 57	
Total		2,011 57
Chelsea Trout Pond— Salaries Miscellaneous		
Total	126 59	
Gaspé hatchery— Salaries Miscellaneous	1,041 66	126 59
Total	1,055 95	9 007 61
ac Tremblant hatchery— Salaries Miscellaneous.	450 00 346 85	2,097 61
Total		796 85
	666 66 769 32	796 85
Total  ake Lester— Salaries Miscellaneous  Total  Iagog hatchery—	666 66 769 32	796 85 1,435 98
Total	666 66 769 32	
Total  ake Lester— Salaries Miscellaneous  Total  Iagog hatchery— Salaries Miscellaneous  Total  t. Alexis hatchery—	666 66 769 32 750 00	
Total  ake Lester— Salaries Miscellaneous  Total  Iagog hatchery— Salaries Miscellaneous  Total  Total	750 00 1,814 91	1,435 98
Total  .ake Lester— Salaries Miscellaneous  Total  Iagog hatchery— Salaries Miscellaneous  Total  t. Alexis hatchery— Salaries Miscellaneous  Total  t. Alexis hatchery— Salaries	750 00 1,814 91	1,435 98
Total  Salaries Miscellaneous  Total  Iagog hatchery— Salaries Miscellaneous  Total  t. Alexis hatchery— Salaries Miscellaneous  Total  Total  Total  Total  Total  Total	750 00 1,814 91 	1,435 98 2,564 91

# FISHERIES GENERAL EXPENDITURE—Continued.

# FISHERIES PROTECTION SERVICE.

	\$ cts.	\$ ets
General Account	10,247 92	10,247 92
Steamer 'Princess.'		
Wages of officers and men Provisions Fuel Repairs and supplies Miscellaneous expenditure Clothing.		
Total		33,233 66
Steamer 'Curlew.'		
Wages of officers and men Provisions Fuel. Repairs and supplies. Miscellaneous expenditure Clothing.	1,742 29 1,126 71 5,356 14 717 07	
Total		14,949 91
'Steamer 'Petrel.'		
Wages of officers and men Provisions Fuel. Repairs and supplies Miscellaneous expenditure Clothing	4,040 38 1,618 37 4,724 76 1,552 10 755 90	20.660.07
Total		20,660 07
Steamer 'Constance.'		
Wages of officers and men. Provisions Fuel. Repairs and supplies Miscellaneous expenditure Clothing	2,509 72 5,433 65 6,808 54 1,557 25	
Total		25,078 54
Schooner 'Osprey,'		
Wages of officers and men Provisions Fuel Repairs and supplies Miscellaneous expenditure Clothing	19 88 1,205 91 581 47	
Total		8,250 09
' Lady of Lake.'		
Wages Provisions. Fuel. Repairs and supplies. Miscellaneous expenditure Clothing	3,137 92 469 03 344 49 1,378 82 551 33	
Total		5,881 59
	-	118,291 78
Carried forward		118,291

# FISHERIES GENERAL EXPENDITURE—Continued.

FISHERIES PROTECTION SERVICE—Continued.

	\$ ets	\$ ct
Brought forward		118,291 7
'Georgia'		
Wages of officers and men Provisions Fuel Repairs and supplies Miscellaneous Clothing	770 76 631 65 1,442 26	
Total		7,280 12
'Swan'		
Wages of officers and men. Provisions. Fuel Repairs and supplies. Miscellaneous. Clothing.	76 60 157 15 307 78 403 79	
Total		2,745 32
'Kestrel' Wages and men. Provisions. Fuel Repairs and supplies Miscellaneous. Clothing.	6,363 89 4,863 00 3,211 66	
Total		32,058 73
Wages of officers and men: Provisions Fuel Repairs and supplies Miscellaneous Clothing	1,843 34 2,025 10 1,976 94 700 75 105 00	
Total	* * * * * * * * * * * * * * * * * * * *	11,354 69
Wages of officers and men Provisions Fuel Repairs and supplies Miscellaneous Clothing Total	4,803 17 4,274 15 3,556 45 2,257 54 692 90	27,373 09
'Canada'		
Wages of officers and men Provisions  Tuel. Repairs and supplies Blothing Wiscellaneous. Charter Pisheries Intelligence Bureau	1,351 50 5,296 36	47,875 94 3,378 8 <b>3</b>
Grand total		250,358 50
Less amount paid by Customs Department for St'r. 'Constance.'		25,078 54
Total	I	225,279 96
		240,210 00

# FISHERIES GENERAL EXPENDITURE—Concluded.

Miscellaneous.	\$ cts.	\$ ets
Building fishways. .egal and incidental expenses.	7,760 61 542 43	
Canadian fisheries exhibit	6,853 60	
Expenditure in connection with the distribution of fishing bounties	5,004 98	
Surveys of oyster beds. Suing licenses to United States fishing vessels.	3,511 93	
ssuing licenses to United States fishing vessels	546 00	
Cold storage	44,112 02 825 97	
Sishery Commission	14.947 68	
Disposal of Dogfish	40,671 50	
Sish drier, Souris, P. E. I.	8,572 55	
Claims of Provincial Governments.	$1,207 \ 34 \ 15,003 \ 33$	
Marine Biological Stations	361 86	
Fish Breeding Est. Great Lakes—	801 00	
Wiarton \$4,663.00. Sarnia \$4,136.70. Sarnia	8,799 70	
Steamer for Lake Winnipeg (Lady of Lake)	8,022 36	
F.P.S. Cruiser B.C. (Plans).	237 04	
Purchases Launches B.C.	2,750 00	
Reconstruction Steamer North	8,536 48	
Expenses re Seizures	3,000 00	
Total.	\$	181,267 38

Statement of Fisheries Revenue paid to the Credit of the Receiver General of Canada for the fiscal year ended March 31, 1908.

Provinces.	Amoun		Refun	ds.	Net Amount.		
	\$	cts.	\$	cts.	\$	cts	
Ontario	480	25		22 25	458	00	
Quebec	6,185				6,185	63	
Nova Scotia	4,487	28		16 83	4,470	45	
New Brunswick	11,561	20		20 00	11,541		
Prince Edward Island	3,013				3,013		
Manitoba	3,529			2 00	3,527		
Northwest Territories	200					00	
askatchewan	958			10 00	0 20	60	
Alberta	2				48,737	55	
British Columbia	49,537		0	00 00		00 (	
Hudson Bay	360 398					15	
Franklin DistrictYukon.	274					00	
Total	80,988		8	71 08	80,116	98	
Licenses to U. S. fishing vessels	10,574			4 50	10,569		
Net Total					\$ 90,686	3 48	

8-9 EDWARD VII., A. 1909 Comparative Statement of Expenditure and Revenue of the

:				of Lapondruic and Revenue of the							
		1890	-91.	1891	-92.	1892	-93,				
Number		Expenditure.	Revenue.	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.				
		\$ ets.	\$ cts.	\$ cts	. \$ cts.	. \$ ets.	\$ ets.				
4	General account Fisheries Ontario. Quebec. New Brunswick Nova Scotia. Prince Edward Island	15,540 30 10,666 98 16,082 77 17,844 19 3,242 25	26,517 70 3,642 14 7,193 69 5,582 65 667 00	15,155 83 10,917 36 15,707 98 18,755 86 1,835 65	4,742 76	20,116 91 11,761 34 15,721 05 19,444 22 2,847 60	30,623 09 7,471 70 7,831 53 6,782 02 304 10				
10	Manitoba and N. W. Terr British Columbia Fish-breeding and fishways Fisheries Protection Service. Miscellaneous	4,220 53 39,496 45	1,234 00 12,859 02 1,286 50 1,934 49	3,593 43 6,158 17 43,957 74 93,397 40 17,449 06	1,079 00 8,192 48 178 00	3,932 96 5,490 60 47,322 49 106,805 39 100,602 14	1,661 68 40,264 00				
	Totals Fishing bounties	207,234 94 165,967 22	60,917 19	226,928 48 156,892 25	49,719 39	334,044 70 159,752 15	94,938 12				
enes		1897	-98.	1898	8-99.	1899-00,					
13 14 15 16 17 18 19 20 21	General Account Fisheries Ontario Quebec New Brunswick Nova Scotia Prince Edward Island Manitoba N. W. Territories British Columbia Yukon	11.140 16	30,574 57 7,571 15 5,317 08 11,511 85 2,707 57 1,515 00 393 87 47,864 75	2,632 12 11,784 22 11,350 27 22,922 50 25,348 11 6,832 85 1,883 37 4,065 68 8,459 47	5,830 85 6,287 71 10,430 08 6,668 22 2,242 24 1,537 85 150 50 45,801 75	652 41 3,804 94 5,452 41 21,659 94 27,461 91 7,364 30 1,723 59 3,848 25 13,662 17	794 12 2,543 04 12,015 27 5,494 49 2,207 12 2,028 00 1,522 50 53,195 35				
$\frac{23}{24}$	Hudson Bay Territory Fish-breeding Fisheries Protection Service. Miscellaneous	28,002 32 101,807 96 59,919 56		34,522 57 105,133 27 23,207 73		38,070 12 97,370 11 31,125 67					
	Totals	280,061 98 157,504 00	107,455 84	427,599 16 159,459 00	75,949 20	411,717 35 160,000 00	79,799 89				
		1904-	05.	1905-	-06.	1906-07.					
27 28 29 30 31 32 33 34 35 36 37 38	General Account Fisheries Ontario. Quebec. New Brunswick. Nova Scotia Prince Edward Island. Manitoba. N. W. Territories. British Columbia Yukon Hudson Bay Territory. Fish-breeding Fisheries Protection Service Miscellaneous Totals.	1,314 75 4,294 60 6,769 16 25,253 16 32,619 85 6,879 05 2,800 64 7,003 55 16,631 37 1,400 00 149,419 24 462,082 12 105,892 97 822,360 46	1,471 51 4,648 86 11,887 19 6,448 88 2,046 50 4,875 70 1,151 50 47,436 00 340 00 10 00 	2,261 66 4,949 67 8,123 04 35,856 38 49,351 10 9,351 81 3,687 07 11,124 22 30,141 33 1,083 31 209,279 78 249,876 37 194,993 61	499 15 7,564 39 11,395 84 4,934 43 2,206 25 4,148 00 868 97 51,532 50 282 00 10 00 	1,437 28 3,188 34 5,590 94 24,987 70 24,989 09 5,792 32 2,173 33 6,359 22 20,381 97 1,030 35 118,681 62 204,837 82 115,219 92 534,669 90	349 10 8,145 97 9,153 08 3,118 73 1,300 94 969 50 29,903 95 173 00 10 00 4,134 00 59,544 25				
-	Fishing bounties	1 MM 000 04		150 MAG OF		159,015 75					

SESSIONAL PAPER No. 22

Fisheries Department from July 1, 1890, to March 31, 1908.

189	3-94.	1894	4-95.	1895	-96.	1896	3-97.
Expenditure.			Revenue	Expendi- ture.	Revenue	Expendi- ture.	Revenue
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ ets.
22,634 37 11,692 82 18,522 94 20,420 81 3,078 55 5,331 29 5,283 21 45,024 67 115,147 59 34,892 19	28,632 82 7,211 82 8,333 24 5,296 27 980 15 926 99 25,337 90	21,938 56 12,459 34 21,370 94 23,555 38 3,796 58 6,178 71 6,218 74 39,730 93 100,207 29 24,619 86	33,211 60 8,836 18 11,170 36 7,075 07 3,312 30 2,458 80 23,517 25	24,917 48 11,970 43 20,526 56 23,049 41 3,555 87 6,915 20 6,226 77 38,050 41 102,021 72 20,203 25	35,681 68 8,160 98 10,696 88 6,180 93 2,161 85 2,256 69 26,410 75	$\begin{array}{c} 2,198\ 47 \\ 21,592\ 40 \\ 12,910\ 80 \\ 21,671\ 92 \\ 23,682\ 33 \\ 3,744\ 36 \\ \left\{\begin{array}{c} 1,908\ 14 \\ 2,181\ 58 \\ 8,841\ 64 \\ 27,330\ 73 \\ 99,357\ 01 \\ 62,777\ 30 \end{array}\right.$	32,814 66 7,876 12 10,110 77 5,239 55 2,032 25 1,719 00 344 13 39,888 82
282,028 44 158,794 54	76,719 19	260,076 33 160,089 42	89,581 56	257,237 10 163,567 99	91,549 76	289,197 01 154,389 77	100,025 30
1900	0-01.	1903	1-02.	1902	?-03,	190	3-04.
1,117 49 3,819 57 7,934 03 28,452 51 35,760 39 7,934 03 2,669 74 6,251 39 17,886 36	717 35 4,738 92 10,150 40 6,595 94 1,525 30 1,103 00 1,222 55 52,960 35	765 78 4,445 93 6,242 58 23,813 62 32,618 00 7,814 02 2,624 87 5,928 22 18,560 73 2,066 66	373 42 2,498 85 11,658 34 6,084 65 1,843 45 2,279 00 950 07 41,178 65 1,130 00	402 97 4,650 53 6,785 86 27,132 84 39,118 79 7,081 60 3,129 70 7,076 26 17,808 45 1,522 00	1,818 83 4,379 15 11,188 02 3,962 45 2,007 35 1,784 00 1,350 50 43,015 02 320 00	1,362 11 4,500 43 7,619 67 27,664 34 30,003 01 7,320 96 2,789 74 7,317 49 15,133 65 1,400 00	2,578 48 1 4,670 64 1 10,593 20 1 3,685 75 1 1,983 42 1 4,002 70 1 922 50 1 56,904 34 2 240 00 2 10 00 2
68,961 40 124,211 21 27,833 79	9,178 50	79,891 85 152,723 69 56,131 26	11,223 65	77,330 86 145,137 49 30,903 27	8,925 40	109,286 07 204,654 66 56,828 18	10,165 50
332,767 07 158,802 50	88,145 11	393,627 21 155,942 00	79,169 58	368,091 12 159,853 50	78,635 82	475,880 31 158,943 70	95,756 53
1907	7-08.						,
3,135 91 4,857 23 8,200 02 36,445 88 45,241 50 9,455 80 4,638 51 12,718 15 31,964 83 1,226 30 235,660 26 225,279 96 181,267 38 956,196 23 156,114 50	458 00 6,185 63 11,541 20 4,470 45 3,013 85 3,527 05 1,151 10 48,737 55 274 00 360 00						

# APPENDIX No. 3.

# NEW BRUNSWICK.

District No. 1, comprising the counties of Charlotte and St. John. Inspector John F. Calder, Campobello.

District No. 2, comprising the counties of Albert. Westmorland, Kent, Northumberland, Gloucester and Restigouche. Inspector R. A. Chapman, Moncton.

District No. 3, comprising the counties of Kings, Queens, Sunbury, York, Carleton and Victoria. Inspector H. E. Harrison, Fredericton.

## DISTRICT No. 1.

REPORT ON THE FISHERIÈS OF DISTRICT No. 1, NEW BRUNSWICK, FOR THE SEASON 1907.

CAMPOBELLO, April 25, 1908.

To the Dominion Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to submit herewith my second annual report on the fisheries of District No. 1, New Brunswick, for the fiscal year ending on the 31st day of March, 1908, with the statistics of the different sub-divisions and synopses of the reports of their officers.

I am pleased to be able to report a very large increase in the value of the catch for this year, compared with 1906. The value of the yield for that year was \$1,364,690. This year the value is \$1,554,601; an increase of \$189,910. I have carefully gone over all the different officers' returns, and in all cases where there was a doubt as to their being correct, I have taken the matter up with the respective officers and whenever we found errors we made the necessary corrections, and the return I am sending you, is in strict accordance with the facts. A late and boisterous spring handicapped the fishermen, particularly those engaged in the lobster fishery and the salmon fishermen of St. John county, but very high prices were paid for these fish and the men engaged did as well as usual.

#### HERRING.

I have to report a large decrease in the amount of large herring salted in barrels. There were only 2,460 barrels of these cured during this year, against 8,384 barrels in 1906. This decrease is due to the failure of the 'Ripplings' fishing ground in the vicinity of the Old Proprietor Ledge, off Grand Manan. The large herring on their way to the spawning grounds, Grand Manan Island, generally 'school' in abundance on the 'Ripplings' during June and July, and the fishermen have only to throw their nets into them during the day time and get all they can cure. The windy weather this year made operations there very difficult, and even when the fishermen could get out the herring acted peculiarly. One day they would be extremely plentiful, and excellent catches would be made but probably no more would be taken for a week. There was also a large falling off in the quantity of herring smoked at Grand Manan. I mention

Grand Manan in particular, because nearly all the herring smoked in this district are the product of that place. The total output of herring smoked and marketed without any further preparation, was 3,995,700 pounds against 6,345,665 pounds in 1906, but there were 119,540 pounds more prepared and sold as "boneless" herring than in the previous year. The boneless herring industry is assuming large proportions and is already an important factor in the industrial life of several of the divisions of this district. I am at a loss for a satisfactory reason for the failure of the herring suitable for smoking purposes at Grand Manan. It cannot be attributed to a general diminution of the fishery, for the reason that the previous year was a banner one for that industry. The fishermen claim that the excessive amount of easterly winds that prevailed during last spring prevented the shrimps, upon which the herring feed, from entering the Bay of Fundy, and on that account the usual abundant supply of these fish did not put in an appearance. The enormous catches of herring made on the western coast of the state of Maine this year is corroborative of this contention.

#### SARDINES.

I have to report a gratifying increase of 24,744 barrels, in the catch of sardine herring over the previous year. In 1906 the catch was 227,525 barrels, this year it is 252,269 barrels. Generally speaking, this has been a highly satisfactory season for this important fishery. The newly formed Weir-men's union mentioned in my report for last year, certainly proved itself master of the situation in dealing with the American sardine packers. At first the canners refused to pay the price, \$8 per hogshead, which the weir-men demanded for the run of 'spring herring', but by loyally standing by each other, and their union as well, the factory-men were obliged to come to terms and pass the union schedule of prices. I am sorry that a breach now exists in the union. Owing to difference of opinions regarding the schedule of prices for the coming season, the Deer Island weir owners have left the parent body and formed a local organization to act independently of the older body. The original union has established a flat price of \$6 per hogshead during the whole season, while the Deer Island union has adopted a graduated schedule of prices, dividing the season into four periods, and asking \$9 per hogshead for the first period, \$6 for the second, \$5 for the third and \$4 for the last period.

#### SALMON.

I have to report a decrease of the catch of salmon for this year compared with 1906 of 232,600 pounds. The weather was so bad during the greater portion of the time the fishermen were engaged in this branch, that operations were almost impossible. Sometimes they could not get out in the bay for three or four days at a time. Very high prices were paid and the fishermen did as well as they usually do. One fisherman at Dipper Harbour told me his catch averaged \$1.75 each fish, and a buyer at Lorneville stated that his supply averaged \$2 each.

### LOBSTERS.

You will notice a slight decrease in the yield of this fishery from the previous year. In 1906 the aggregate catch was 8,764 cwt., sold in the shell and the output of the canneries was 80,236 cans. This year there were 8,701 cwt., sold in the shell, and the pack of the canneries fell off to 54,412 cans.

#### COD.

There was a large increase in the quantity of dried cod over last year, In 1906 there was 3,538 cwts. for this district, while the yield for this year is 5,042, cwts., but there is a corresponding decrease in the quantity of cod sold fresh and frozen, and taken as a whole there is very little difference in the catch of the two years.

#### HAKE AND HADDOCK.

As pointed out in my preliminary report the season of 1907 will be long remembered as the most profitable one ever experienced. As this fishery does not commence until about the middle of June, the bad weather of the spring which proved so disastrous to some of the other branches did not have any effect upon this. There were 15,560 cwts., of dried hake sold in 1906, and 38,032 cwts. this year. An increase of 250 per cent. The fishermen derived from the sale of their hake and hake sounds in 1906 \$42,162. This year the proceeds of this fishery amounted to \$113,272. This increase extended to the quantity of haddock sold fresh; 199,925 lbs., were sold in 1906, and 1,486,200 pounds in 1907. While hake were in abundance all over the Bay of Fundy this year, the fishermen of Beaver Harbour, Charlotte county, did the best of any. Several of the small trawl boats, with two men in a boat, stocked upwards of \$2,000 during the summer season at this branch alone.

#### POLLOCK.

There was a decrease of 3,272 cwts, this year in the total catch of pollock. The shortage is due to weirs at Campobello not taking any this year. The hand line fishermen ef Passamaquoddy caught fully as many as last year and received a slightly increased price.

#### CLAMS.

There was a tremendous increase in the output of clams, this year compared with any other year. Last year there were 7,703 barrels exported in the shell. This year the export of shelled clams reached a total of 47,943 barrels. In 1906, there were 556,350 cans of clams packed, and 649,864 cans during this year. The total value of the clam industry for 1906 was \$65,506. The value of the output for this year is \$138,920. An increase of over 200 per cent.

#### ALEWIVES.

The catch this year was 15 per cent less than in 1906. Overseer Belyea recommends that fishing through the ice be prohibited.

### SHAD.

The yield of this fishery dropped from 810 barrels in 1906 to 668 barrels this year. A decrease of 17 per cent.

### DOGFISH.

Fortunately for our fishermen these pests were not very plentiful this season. They seem to be very erratic in their movements, and have not visited this district to any extent for the past two years.

### VIOLATIONS.

Owing to the existing regulations in the neighbouring state of Maine, which allow the purchase of lobsters during every month, it is very difficult to keep some of the fishermen from violating our close time regulation. I had complaints against two offenders, convicted them and imposed fines and am positive that the lobsters received better protection this year than they have for the last ten years. The most serious thing we have to contend with is the contemptible practice of destroying the pollock by the use of dynamite. These law breakers have two grounds on which they operate. One is in the waters contiguous to the American boundary, and the other off Whitehead, Grand Manan. It has been very difficult to break up this business at Whitehead. For the fishermen will not complain on the offenders. Whenever the Curlew is around they simply will not operate, but find numerous opportunities to pursue their nefarious practice

during her absence. It appeared to me that the only effective method to extirpate this evil was to appoint an officer from one of their fellowmen. A man who would be out among them every day and know all that was transpiring. Acting upon my recommendation your department gave me permission to engage such an officer. I was very fortunate in getting Mr. I. D. Harvey to accept this position. I am pleased to report that the appointment of this man sounded the death knell of dynamiting at Whitehead for 1907. I sincerely hope that your department can see it's way clear to supply Mr. Harvey with a motor-boat. Acting upon your advice, I arranged with Mr. Jas. Donahue, Commissioner of Fisheries for the state of Maine, for him to pay a visit to Campobello and go out with our patrolmen and watch the dynamiters perform on the American side of the boundary, I have already reported to you the great success that attended this manœuvre. How we went out in the launch belonging to the Curlew and gave an opportunity to see how they were carrying on wholesale dynamiting opera-tions on their side. Suffice it to say here, that he rounded up the offenders in the courts of his state, and by the imposition of heavy fines, and imprisonment in one case, succeeded in effectually stopping this business for this year. On the 9th day of July while cruising with patrolman Mitchell in the launch belonging to the Curlew, accompanied by acting Captain Robinson, we captured a young Canadian fisherman, with dynamite in his boat. He acknowledged that he had it for the purpose of killing pollock. A fine of \$100 was imposed. After that we had no more trouble with the dynamiters.

#### IMPROVEMENTS.

While there are many improvements to record in the quality of the boats used by our fishermen, and while the value of the material used in their occupation has increased from \$815,988 in 1906, to \$961,132 in 1907, showing the permanency of the industry, and the energy of our fishermen, as well, yet the one great improvement that strikes the observer is the large number of gasolene boats that are now in use. In the village of Wilson's Beach, alone, there will be between eighty and ninety gasolene boats used this summer. The great increase in the catch of hake is in a measure due to so many fishermen being supplied with these boats.

### SYNOPSES OF FISHERY OFFICERS' REPORTS.

Overseer Frazer, Grand Manan, reports a large falling off in the value of the catch of that place, due to the great decrease in the quantity of 'smoked herring.' He reports the regulations as being generally well observed: regrets he is not supplied with a motor boat by the department, but has built one at his own expense during this winter.

Overseer Savage, Campobello, reports very little change from last year. The

great increase in the catch of hake was the only noticeable change.

Guardian McNeill, West Isles, reports an increased catch for the year; states the close time regulation on the lobster fishery was better enforced than in any previous year. This he attributes to the good work done by the two patrolmen in the launch from the Curlew.

Overseer Belyea, St. John, reports a fair year for the fishing industry at his place. There was an average catch and exceptionally high prices. No branches are being over fished. Recommends that the artificial propagation of shad be introduced on the St. John River. Also recommends that some effort be made to compel the packers of pickled fish to put them in air tight barrels.

I desire to express my appreciation of the courteous treatment accorded me by the

officials of your department.

I have the honour to be, sir,
Your obedient servant,
JOHN F. CALDER,
Inspector of Fisheries.

### DISTRICT No. 2.

Moncton, N. B., June 2nd, 1908.

To the Dominion Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to submit my report of the Fisheries in District No. 2 of the province of New Brunswick, consisting in the counties of Restigouche, Gloucester, Northumberland, Kent, Westmorland and Albert, together with the parish of Stanley, in the county of York, and the parish of Aberdeen in the county of Carleton, for the fiscal year 1907-08, and returns giving the products and values by districts and counties, also an estimate of the capital employed in the prosecution of the Fisheries.

These returns show aggregate values of \$3,715,871 which is the largest, I believe, ever recorded, though prices are much higher than they were some years ago. I will

now refer briefly to the several principal kinds of fish caught.

#### SALMON.

Were a good average catch, though rough weather interfered very much especially in exposed places, and the fishermen of the Restigouche River believe the large number of white whales there last summer helped to keep the salmon out.

#### SHAD.

Were fully up to last few years, but what is required to restore this fishery in the head waters of the Bay of Fundy is a close time during spawning season; this in a few years would make them as plentiful as ever. I do trust the proposed commission will have the effect of again making this the important fishery it once was.

#### HERRING.

The big run of spring herring came as usual and large quantities were netted for food, smoking, bait, &c. The fall run was good on the Caraquet banks, but they were not so plentiful on those off Miscou.

### MACKEREL.

These fish appear to be erratic in their movements but a fair catch was made notwithstanding stormy weather.

#### COD.

Were nearly an average catch and prices high, many more would have been taken only for the exceedingly bad weather both for fishing and curing during the entire season.

### SMELTS.

More were taken than ever before, the increase being principally in the Miramichi districts. Overseer Abbott, who kept a close record of all shipments, says that over 6,000,000 lbs. (3,000 tons) of fresh fish were handled at and sent away from the Miramichi River last winter.

### LOBSTERS.

As stated in my preliminary report there was a very large increase in the pack of lobsters and prices were enormously high; there has been improvement in this fishery for past three years, which appears to show they are not being fished out as was feared some time ago. Hatcheries and more attention to the preservation of spawned lobsters is also helping the supply.

OYSTERS.

The quantity raked has been up to the average, notwithstanding the much shorter time for fishing given by the new regulations.

#### CLAMS

Not quite so many taken, owing to the close season established, which gives much less time to fish in midsummer when there is little else to do, and the fishermen not being allowed to take them in the fall when raking oysters, under which conditions large areas amongst and around the oyster beds under present regulations cannot be fished at all, as to go amongst these oyster beds fishing quahogs during close season for oysters would be ruinous to the finest beds in New Brunswick.

Fully the usual quantity of soft shell clams were canned by Messrs. A. & R. Loggie,

at Inkerman, Gloucester county.

Of the many other kinds of fish in our waters a fair average quantity was taken.

I have the honour to be, sir,

Your obedient servant,

R. A. CHAPMAN,

Inspector of Fisheries.

### DISTRICT No. 3

COMPRISING THE COUNTIES OF KINGS, QUEENS, SUNBURY, YORK, CARLETON AND VICTORIA, IN NEW BRUNSWICK.

FREDERICTON, N. B., May 19, 1908.

To the Dominion Commissioner of Fisheries, Ottawa

Sir, — I have the honour to submit my annual report on the state of the fisheries in District No 3 (inland), in the province of New Brunswick, for the fiscal year ending March 31st, 1908, with statistics showing the quantity and value of fish taken, also the quantity and value of materials used in connection with the prosecution of the fishing industry in my district.

A comparative statement of the value of fish taken and materials used in the years

1906-07 and 1907-08, is herewith given, viz.:—

1906-07	\$42,646	Value of materials. \$47,004 44,848
	\$12,554	\$2,156

showing a considerably less valuable catch of fish than my previous report. However, there are two matters of some importance to be observed in connection with the general result as shown above, viz., the statistics for 1906-07 were for fifteen months, whereas those for 1907-08 are for twelve months, and a difference of 5c. per pound on the price of salmon in favour of the former season, probably accounting for one-half of the difference in the two reports. Notwithstanding, the fact remains that there was a less quantity of nearly every kind of fish in this district taken last season.

The most unpleasant feature about it is the decreasing catch of shad from year to year. Some fishermen tell us that they believe shad are moving to some other waters, that they do not come to the Bay of Fundy and tributary waters as plentifully as formerly. True it certainly is, they do not come this way as formerly, but I do not think they are going anywhere else. I believe it can be charged to overfishing and, I trust, the forthcoming inquiry by those entrusted to make it, will be the means of having matters arranged so that shad will have a better chance to propagate, and still give fishermen fair treatment.

Considering the fishing season from opening to closing, respecting weather and water conditions, it was quite unfavourable. There was much cold and rainy weather and the St. John river and tributaries were at a high pitch during the whole season. Possibly, these conditions affected the catch of salmon and trout to a greater extent than other kinds of fish, although it probably affected the catch of alewives also.

The surface fly-fishing on the Tobique river was the least satisfactory in a number of years. The superintendent of the Tobique Salmon Club seems satisfied that the causes were poor conditions of weather and water and not a scarcity of salmon. The fishway in the dam on that river was kept in good condition and hundreds of salmon pass through it each year.

Through York and part of Carleton counties there is great difficulty in enforcing the fishery law in respect to the taking of salmon, and if regulations could be made allowing these people some privileges for fishing salmon with nets, it would be very much appreciated by a great majority of the people, and I have no doubt would conserve a sufficient supply of parent salmon. Two small fines were imposed in the past season for fishing with nets on Sunday.

Regarding salmon, it is the opinion of all who have anything to do with handling them, that they are not decreasing but rather growing in numbers in the St. John river and tributaries, but that the reason for the smaller catch last season was the water being very high in the rivers, allowing the fish a better chance to reach the spawning beds, which will return good results in the future. Probably a little better protection, made possible by the Forest, Fish and Game Protective Association of New Brunswick placing two men on the river, in conjunction with the special guardians of your department, had something to do with the total catch for the season.

#### SHAD.

As referred to above, it is with great regret the fishermen, as well as all classes of our people, find these excellent table fishes becoming scarcer from year to year.

I think the real explanation is overfishing, and fishermen along the St. John and Washademoak rivers at least, realise the necessity for action of some kind at once, and are quite willing that greater restriction be placed on the taking of them.

Shad in good condition, caught in or near salt water, is preferred to the salmon, by many people.

#### ALEWIVES.

There are less of these fish taken now than a few years ago and it is possible that some greater restrictions, other than the present weekly close time, will need to be placed on the catching of them.

There is usually a good market for all the alewives taken in my district, and as shad have become scarcer and higher in price, these fish in the fresh state are to some extent replacing them.

### TROUT.

The catch of trout was somewhat less last season, than formerly, probably on account of the bad conditions, cold, dark weather and high water in the streams.

There is an increasing number of foreigners coming to the province every year and many of them are erecting expensive cottages near the different lakes and with their families spend two or three months about the water, and I find that where the best trout fishing is to be had, the most foreigners are located.

#### PICKEREL.

The catch of these fish is less than formerly, probably because of the diminished size of the fish. If it is desirable to have them in our waters it might be advisable to forbid the use of the very small meshed nets.

#### BASS.

While the catch of bass does not amount to much, comparatively, still there is something gratifying in the report of the catch last winter. The reported catch is ten 22—4

times greater than in 1906-07. In former years fishermen made much money fishing bass in the Belleisle bay, Kings county, but in late years the catch has been insignificant and it is pleasing to note the improvement and I trust it will be permanent.

#### STURGEON.

The catch of sturgeon is also somewhat less than that of 1906 and seems to have been very much less in Kings county, where all the sturgeon fishing in late years, in my district, has been carried on. Last season two parties fished in Queens county waters, one in the St. John river and the other at the head of Grand lake, and both seem to have been fairly successful, regarding the number of fish taken, but the amount of roe, or caviare, got from them was very little, indicating small fish. This, of course, makes the financial result less satisfactory as the caviare is of so much more value than the fish itself. I would very much like to see the time when these fish are again as numerous in the St. John river as they were years ago. They would be a very valuable asset to our fishermen.

# SYNOPSES OF REPORTS FROM FISHERY OFFICERS.

#### KINGS COUNTY.

Special Guardian Jenkins, Belleisle bay, reports fishing fairly good in his district. A gratifying increase in the catch of bass.

Special Guardian Coggan, Trout creek, etc., says surface fly fishing was very poor, he thinks on account of high water.

Special Guardian Myers, Kennebecasis, thinks the fishing was fully as good in his district as in 1906. The sawdust nuisance was very much curtailed last season.

Special Guardian Dunham, St. John river, says the fishing was not nearly so profitable as in 1906. The water was very high, which he considers had a good deal to do with the result.

Special Guardian Belyea, St. John river, reports fishing nearly a failure in his district. He recommends prohibiting sturgeon fishing for some years.

### QUEENS COUNTY.

Overseer Belyea (Queens West), reports that fishermen in his district have the impression that shad and alewives are going to some other waters, judging from the reports from other counties. Not many salmon caught in his district. One party fished for sturgeon with fair result.

Special guardians attended well to their duties and fishermen are law-abiding.

Overseer Hetherington, (Queen East), reports salmon not much fished for, increasing yearly. Shad decreasing from year to year, overfishing the cause, he says. Alewives abundant, not much fished for on account of the low price and scarcity of help. Pickerel overfished with too small meshed nets. Only one party fished for sturgeon part of the season, and had satisfactory catch. He says there are not any whitefish in our waters. Lake Ontario herring placed here under the name of whitefish but never exceed one pound in weight and grow very slowly.

Overseer McLean, Sunbury county, reports salmon running much earlier than formerly, and the water being very high in the river, fishermen are unable to get their nets set, consequently the catch is not so heavy as it used to be. Shad fishery being depleted. Alewives not so abundant, probably on account of high winds and roily condition of the water.

Overseer McKay, York county, reports fewer salmon taken than in 1906. He considers the excessively high water in the St. John river throughout the season responsible for this. Many fishermen were unable to set their nets with satisfactory results. The high water also interfered with illegal fishing to a great extent and helped the special guardians in their duties. He strongly urges that six inches mesh be made the minimum size allowed, also four pounds salmon be the minimum weight allowed on the market, and that every property holder, who applies be granted a license, instead of only renewal licenses. Shad fishing quite unsatisfactory, most of the fish taken in July. Trout fishing was fairly good, but too many small fish caught. He urges that more trout fry be placed in the lakes and streams near railways, where they could be conveniently handled. Good trout fishing is a great inducement to one class of sportsmen and they are coming in increasing numbers each year to spend a whole season about the lakes. As they bring their families and employ boatmen they spend much money. In Carleton county the protection of salmon was better than formerly, on the St John river. Trout fishing was fair.

Overseer Leclair, Victoria county, reports many less salmon caught in his district than in the previous year, although there were plenty of fish in the Tobique waters. The season was very unfavourable for surface fly-fishing. The Fishery Regulations were very well respected and guardians faithful.

Overseer Gagnon, Victoria county, reports the fisheries in his district about as usual. All fish caught used for home consumption, and that the special guardians attended well to their duties, with no infractions reported.

Mr. Thos. F. Allen, Superintendent of the Tobique Salmon Club, wrote me that 1907 was another off-year. He partly lays the result to the amount of net fishing along the St. John river, and to the immense numbers of small salmon destroyed in the small meshed weirs in St. John harbour which are allowed to remain out after the herring fishing season is past. (I may say this same statement was made to me, a few days ago, by a fisherman living near the harbour.) Mr. Allen, however, reports that there were a great many spawn fish on the beds and that the club had twenty one men employed to protect them until they were ready to return to the salt water. I must say that too much credit cannot be given this club for the very great service they are doing our people along the St. John river and tributaries, and the bay fishermen for the splendid protection they are giving the salmon on the Tobique river.

As reported to your department some time ago, a movement has been set on foot to establish a pulp mill at a place called the 'Narrows,' on the Tobique river, and dam said river. Such an act would, without doubt, destroy the salmon fishery of the whole St. John river district, including the bay salmon fishery. I trust the provincial

authorities will not entertain such a proposition.

In conclusion, I may say that the suggestion of Overseer McKay, regarding trout fry, would be moving in the right direction. With regulations better governing the catching of shad, I think that part of the fishery will improve, and I see nothing discouraging regarding the future supply of salmon, but with good care, it will rapidly increase.

I have the honour to be, sir,

Your obedient servant,

H. E. HARRISON,
Inspector of Fisheries.

8-9 EDWARD VII., A. 1909 APPENDIX

# NEW BRUNSWICK-

Return showing the Number, Tonnage and Value of Vessels and Boats and the John, Province of New

		Fishing Vessels and Boats.						Fis	FISHING GEAR OR MATERIALS.						Lobster		
	Fishing Districts.		V	essels.			Boats	,		Gill ne	ets.		Sein	es.	Car	nneries	
Number.		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Vallue.	
3 4 5 6 7	Charlotte County.  Lepreau to Red Head Red Head to L'Etang L'Etang to St. George St. George to St. Stephen Grand Manan Campobello West Isles St. George and vicinity.  Totals St. John County.	57 11 2	72 22 1030 237 31	1400 300 36500 7300 1800	180	210 261 142 267 283	4000 3900 6525 28500 18400	158 140 174 230 284 343	95 106 935 84 40	3078 3490 28450 2508 1250	700 1272 10320 1079 477	70 76 87 42 31 86	2220 2280 3048 1480 1048 2040	3700 4560 5 5655 5 5400 5 2400	2 1	5000	
3 4	St, John Harbour. Lepreau to Chance Harbour. Chance Harbour to Mispec Mispec to Tynemouth Creek. Tynemouth Creek to Albert Co. Totals. Grand totals	3 4 6 3 1 17	82 83 40 20 285	400 1450 2050 3000 600 7500	35 30 6 2 80	178 22 22 358	5300 1700 11078 176 440 18694	36 176 22 22 502	94 910  25 	92800 1250 110108	1290 11130  350 22845	25	180 625  1255	100 815		11500	

No. 3—Continued.

# DISTRICT No. 1.

Quantity and Value of all Fishing Materials in the Counties of Charlotte and St. Brunswick, for the Year 1907-8.

PLAN	г.						K	CINDS	of ]	Fish.						
Tr	aps.	lb.	d, 1b.	salted, brls.	1b.	ed, lb.	ess or	rved in	in shell,			, lb.	l, cwt.	red,	vt.	lb.
Number.	Value.	Salmon, fresh,	Salmon, smoked,	Herring, salted	Herring, fresh, lb.	Herring, smoked,	Herring, boneless or kippered, lb.	Lobsters, preserved cans, 1b.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, fresh, lb.	Haddock, fresh, lb.	Haddock, dried, cwt.	Haddock, smoked, finnan haddies, lb.	Hake, dried, cwt.	Hake, sounds,
1200 2280 1365 475 11600 1526 1300 	\$ 1200 2280 682 403 11600 1144 600			2025 160 2210		57000 †388500	3190 110000 150000	33888 16224	512 335 2601 239 390	599 480 303 1814 1457 331	57000	81600 56900 380000 24100 732000 82900	500 179	85500 300	2090 11768 895 579 6000 8680 370	10600 428 536 6000 10090 330
640		208000 39600				50000			179	58	17100	36700			4800	3900
1625	1380	174900		245					438		128700	92000			2850	3000
1540	1155				,.				497							
800	1200			5					510	,						
4605 24351		$\frac{423000}{430000}$			20000  20000	50000 3995700	263190		1624 8701		145800 202800	$\frac{128700}{1486200}$	686	108300	$\frac{7650}{38032}$	6900 36384

<sup>\*</sup>These are really the product of Grand Manan. Having been caught and smoked there and brought to Campobello to be finished as boneless herring.

<sup>†</sup>There were 150,000 pounds more smoked at Grand Manan, but were skinned and prepared as boneless herring at Campobello and appear as the catch of that place.

8-9 EDWARD VII., A. 1909

RETURN showing the Kinds and Quantities of Fish Products in the Counties of Charlotte and St. John, Province of New Brunswick, for the Year 1907-08.

(		Number.		H01004700≻0			107004	20		
			cts.	99248538	8	1	8888	8	00	00
		Total Value or All Fish	99	76,985 453,817 106,630 219,105 239,256 140,692 110,701 3,480	695 68300 1,350,669		112,150 24,646 56,821 5,120	5,195	203,935	695 68300 1,554,601
		Dulse, lb.			68300			:	:	00889
		Cockles, brls.		695	695			:	1	695
		Fish as manure, brls.		200	2040		415	:	415	2455
		Fish as bait, brls.		7000 2000 1740 450 200 5485 20 2138	24073		250	:	485	354 4040 34875 24555 2455
		Fish oil, galls.		2000 8500 750 480 2000 14400 3000	31130		1720 2025	:	3745	34875
		Clams, shelled, galls.		4040	4040		: : : :	. :		1040
4		Squid, birls.		324	354			:	1 :	354
		Clams, canned, cans.		336000 34000 39000 30000	649864			:		649864
		Flounders, lb.		4000	1000			:	1:	1000
	ISH.	Clams, brls		15400 21000 2334 3662 4475 4475	47943		: : : :	:		47943
	Kinds of Fish.	Sardines canned, cans.		8800 15400 31050 5300000 21000 50125 2834 03525 3662 9750 672 2880 672 10514 400000 4475	246644 5700000 47943 4000 649864			:		200 252269 5700000 47943 4000 649864
	Kind	Sardines, brls.		8800 31050 50125 103525 9750 2880 40514	246644		1625	:	5625	252269
		Eels, brls.			1 :		200	:	200	200
		Canned, scallops, cans.		300 1450 43680	1870 43680		: : : :	:		43680
		Scallops in shell, brls.		300 1450 120	1870		: : : :	:	:	1870
		Alewives or gaspereau,					5000 12350	:	13133	51650 13133 1870 43680
The second secon		Smelts, lb.		6000 700 4800 2750 2400 30000	46650			:	2000	51650
		Shad, brls.			:		99 ::		899	899
		Trout, lb.		4000	4000		: : : :	:	:	4000
		.dl ,tudilaH		1850 950 10800	25770 13600 4000				:	25860 13600 4000
		Pollock, cwt.		210 4145 55 3408 14880 3072	25770		50		90	25860
		Fishing Districts.	Charlotte County.	1 Lepreau to Red Head 2 Red Head to L'Etang 3 L'Etang to St. George 4 St. George to St. Stephen 6 Gand Manan 6 Campobello 7 West Isles 8 St. George and vicinity	Totals	St. John County.	1 St. John Harbour. 2 Lepreau to Chance Harbour. 3 Chance Harbour to Mispec. 4 Mispec to Tynemouth Creek 5 Tynemouth Creek to Albert		Totals	Grand totals
		Number.		1004501-0			H0100470			

## RECAPITULATION

OF the Yield and Value of the Fisheries in District No. 1, New Brunswick, comprising the Counties of St. John and Charlotte, for the Fiscal year 1907-8.

Kinds of Fish.	Quantity.	Price.	Value.
G 1		\$ cts.	\$ cts
Salmon, fresh Lb.		0 15	64,500 00
" smoked		0 20	1,600 00
Herring, saltedBrls		4 00	9,840 00
fresh Lb.		0 01	200 00
m smoked	3,995,700	0 03	119,871 00
boneless	263,190	0 10	26,319 00
Lobsters, preserved Car		0 30	16,323 60
" fresh in shell Cw Cod, dried		10 00	87,010 00
Cod, dried Lb	5,042	5 00 0 04	25,210 00
Haddock, fresh	$ \begin{array}{c c} 202,800 \\ 1,486,200 \end{array} $	0 03	8,112 00 44,586 00
" dried		3 50	2,401 00
finnan haddiesLb.		0 06	6,498 00
Hake, dried Cw		2 50	95,080 00
sounds		0 50	18,192 00
Pollock, dried Cw		3 00	77,580 00
Halibut, fresh Lb		0 10	1,360 00
Trout	4,000	0 12	480 00
Shad Brl		12 50	8,350 00
Smelts, freshLb		0 08	4,132 00
AlewivesBrl		5 00	65,665 00
Scallops, in shell	1,870	2 00	3,740 00
canned		0 10	4,368 00
EelsBrls		10 00	2,000 00
Sardines, fresh	252,269	1 50	378,403 50
canned Car	s. 5,700,000	0 05	285,000 00
Clams, in shell Brl	s. 47,943	1 50	71,914 50
canned	is. 649,864	0 10	64,986 40
shelled	s. 4,040	0 50	2,020 00
Flounders Lb		0 03	120 00
Squid Brl	s. 354	4 00	1,416 00
Fish Oil	34,875	0 30	10,462 50
used as baitBrls		1 50	36,832 50
n n fertilizer	2,455	1 00	2,455 00
Cockles.,	695	5 00	3,475 00
Dulse Lb	. 68,300	0 06	4,098 00
Total value of catch for 1907			1,554,601 00
11 11 1906			1,364,690 51
Amount of increase for 1907			189,910 49

# RECAPITULATION

OF the Number and Value of Vessels, Boats, Weirs, Fish houses, &c., used in the Fisheries of District No. 1, New Brunswick, comprising the Counties of St. John and Charlotte, for the fiscal year of 1907-8.

No.	Material.	Value.	No.	Material.	Value.
1,706 2,738 434 251	Fishing vessels (1826 tons) boats. Gill-nets (fathoms 151,070) Seines (fathoms 13,935). Pile-drivers and scows. Trawls Weirs. Fish and Clam Factories Hand lines		24,351 8 777	Lobster canneries.  I traps  Freezers and ice houses  Smoke and fish houses.  Piers and wharfs.  Tugs and steamers.  Total value of material	\$ cts 11,500 00 22,124 00 62,650 00 166,685 00 94,010 00 31,195 00

8-9 EDWARD VII., A. 1909

# NEW BRUNSWICK-

Return showing the Number, Tonnage and Value of Vessels and Boats and the Quan for the fiscal year

		-	Fishi	ING VE	SSELS	AND	BOATS	š.			Fish	ING (	SEAF
	FISHING DISTRICTS NAME		Ve	essels.			Boats.			Fill Net	ts.	Tra	wls.
Number.	AV AM Er	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms,	Value.	Number.	Value.
	Restigouche County.			\$		-	\$				\$		\$
1 2	Above Dalhousie	i	26	500	4	23 210	400 3200		23 140				
	Totals	1	26	500	4	233	3600	410	163	26300	25000		
	Gloucester County.												
	Beresford and part of Bathurst Caraquet, New Bandon and part	2	29	2200	10	450	10500	900	530	40700	21600	2	40
5	of Bathurst	138	1640	57000	540	502	17500	1040	2100	70000	43000	250	140
6	gan mainland	23 70	270 915	9500 39000	98 290	280 520	8000 24000		4800 1300			50 150	
	Totals	233	2854	107700	938	1752	60000	3800	8730	247700	95600	452	243
	Northumberland County.												
8 9	Neguac and vicinity.  Bay du Vin and vicinity.  Chatham and vicinity.  Southwest and Northwest Miramichi rivers.	1 4	13 55	520 1800	3 14 	210 208 150	7000 9000 4000 2500	550 300	580 800 420	80000	70000 25000	4	7
	Totals	5		2320	17	708	22500	1360	2170	174000		4	7
	Kent County.												
12	Richibucto, St. Louis, &c Buctouche and vicinity Cocagne and vicinity					250 600 394	16200 18000 7200	1000	4800 2100 1120	46000		10	28
	Totals					1244	41400	2011	8020	149300	43800	10	28
	Westmorland County.												
.5 .6	Shediac, Moncton, &c Botsford Sackville and Westmorland Dorchester	;				465 500 260 28	15000 19000 5200 1500	900 360	850 700 500 160	19000 10000	17000 7000 3000 2500		
1	Totals					1253	40700	2175	2210	76000	29500		
18	Albert County					18	650	30	30	3600	2000		
	Grand totals	239	2948	110520	959	5208	168850	9786	21323	676900	342900	466	278

# District No. 2.

tity and Value of all Fishing Materials, District No. 2, Province of New Brunswick, 1907-1908.

OR M	IATERI.	ALS.			Lobste	R PLAN	RT.				Kinds	or Fish.			
Smel	lt-nets.	Ha Li	and nes.	Can	neries.	Tra	ıps.	os. Salmon, Herring.			Mack	erel.			
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Fresh.	Preserved in cans.	Smoked.	Salted.	Fresh.	Smoked.	Fresh.	Salted.
	\$		\$		\$		\$	Lb.	Lb.	Lb.	Brl.	Lb.	Lb.	Lb.	Brls
100 23	5000 1800		10	$\frac{1}{2}$	2600	100 5000	100 4500	94400 142000	1000		1380	450000	226000	[ 	
123	6800	60	10	2	2600	5100	4600	236400	1000		1380	450000	226000		
		320		5	2600	8500	8000	105000	600	1000	13000	170000		5000	5
80			1700	18	10000		24000	282000			32000			21000	20
145 68	3400	$650 \\ 1300$		9 37	12000 31000	18000 61000	16000 58000	85000	1800	1200	15000 20000	75000 80000		25000 35000	10 10
293	13700	4570	3300	69	55600	113500	106000	472000	2400	2200	80000	625000	50000	86000	45
172 400 493	15000 25000 40000	180 25		9 3	6000 4000	9000 8000	8000 8000	86000 195000 124000			11000 3000 160	15000 80000 2000	4000 1000	4000 40000 500	20
								115000		4000					
1065	80000	205	185	12	10000	17000	16000	520000		4000	14160	97000	5000	44500	20
298 260 67	12000 11000 2700	1000		10 23 6	4500 10000 3400	13500 17000 4200	12800 16000 4000	123000	1200	1000	6620 20000 4000	236000 130000 26000		192000 2000 2500	
625	25700	1770	570	39	17900	34700	32800	123000	1200	1000	30620	392000		196500	290
143 68 40	7000 2400 1400	100	40 30 35	26 32	6000	25000 70000	24000 60000	3000 1200 11000			16000 13000 1500 120	420000 100000 70000	480000	3000 3500 1200	
251	10800	300	105	58	17000	95000	84000	15200			30620	590000	1380000	7700	
						300	300	5000			320	12000			
2357	137000	6905	4170	180	103100	265600	243700	1371600	4600	7200	157100	2166000	1561000	334700	355

8-9 EDWARD VII., A. 1909
Return showing the Kinds and Quantities of Fish and Fish Products

										K	INDS	of Fish
	FISHING DISTRICTS	Lobst	ers.	Co	d.	d	На	ıke.				
Number,	Name.	Preserved in cans.	Fresh in shell.	Dried.	Tongues and   sounds.	Haddock, dried.	Dried.	Sounds.	Halibut.	Trout.	Shad.	Smelts.
	Restiyouche County,	Lb.	Cwt	Cwt.	Brls	Cwt	Cwt	Lb.	Lb.	Lb.	Brl.	Lb.
1 2	Above Dalhousie	38800	100 210				80				,	174500 75000
	Totals	33800	310	•••			80			9500		249500
	Gloucester County.											
3 4	Beresford and part of Bathurst Caraquet, New Bandon and part of	22300		3500			200			10000		600
5	Bathurst	207000		38000			2400			11000	45	35000
6	gan mainland Shippigan and Miscou islands	117500 602000		8600 22000	30 100		800 1800			6000		420000 310000
	Totals	948800	1050	72100	330	1720	5200	5500	130000	27600	110	1086000
9	Northumberland County.  Neguac and vicinity. Bay du Vin and vicinity. Chatham and vicinity Southwest and Northwest Miramichi rivers.	110000 90000		1300 500 180		2000	600	1000	3000 2000	7500 1000 5000 22000	125 175	80000 150000 230000 20000
	Totals	200000	250	1980		2200	820	1000	5000	35500	1100	4620000
	Kent County.											nor monomenancy
12	Richibucto, St. Louis, &c, Buctouche and vicinity Cocagne and vicinity	255000 170000 63500	120		6	300	1780 200 70		4650	5700 2200 2500		816000 500000 210000
	Totals	488500	440	1590	6	300	2050	2900	4650	10400	122	1526000
	Westmorland County.											
15 16	Shediac, Moncton, &c	277500 718000 5000	1000	100 100 10			60			11000 7000 2200 3000	35	41000 30000 10000
	Totals	1000500	1450	210			60			23200	1485	81000
18	Albert County		200							9500		6000
	Grand totals	2676680	3700	75880	336	4220	8210	9400	139650	115700	2937	8297500

in District No. 2, Province of **New Brunswick**, for the Year 1907-08.

φ.	[ [		1	(						(				
Alewives or Gaspereau.	·		ers.	Flounders.	Tom Cod or frost fish.	d.	Coarse and mixed fish.	oil.	as bait.	as manure.	Seal skins.	ıs,	Total Value OF ALL Fish.	
Alewiv reau	Bass.	Eels.	Oysters.	Flon	$\left egin{array}{c} \mathbf{T}^{ m om} \\  ext{fisl} \end{array} ight $	Squid.	Coarse fish.	Fish oil.	Fish	Fish	Seal	Clams		- Namehon
Brls.	Lb.	Brls.	Brls.	Lb.	Lb.	Brls.	Brls.	Galls.	Brls.	Brls.	No.	Brls.	\$ cts	
		17 45		50000 18000	15000 20000		45 50		$\frac{10}{200}$	40 500			36,185 00 65,570 00	
		62		68000	35000		95	• • • • • •	210	540			101,755 00	
	1200	$^{24}$		15000	14000	12	380	200	1800	15000	8	1800	129,743 00	
	8600	180	900	50000	130000	400	700	14000	11000	30000	16	4000	578,600 00	
160	6000 7200	500 100	30 40	20000 15000	30000 12000	80 220	500 600	1200 7200	3000 15000		20 24	7500 3000	255,050 00 475,280 00	
160	23000	804	970	100000	186000	712	2180	22600	30800	71000	68	16300	1,438,673 00	
200 500 350	15000 5000 3500	180 200 60	1400 7000 200		50000 100000 1000000		3000	100	2000 5000 50			400 300	203,240 00 290,470 00 257,731 00	
650	70000	600			70000								50,300 00	
1700	93500	1040	8600	440000	1220000		3000	120	7050	26200		700	801,741 00	-
1585 600 300	13500 1600 1800	510 100 110	565 2600 1500	34000	75000 50000 30000	5	360 9000 320	1120 50	3900 5000 1800	20000	16	160 6000 5000	272,071 00 264,680 00 96,805 00	
2485	16900	720	4665	54000	155000	5	9680	1170	10700	33000	16	11160	633,556 00	
350 200 150	3200 1500 2000	170 75 75 50	650 400 150		25000 12000 5000 5000		1000		15000 30000 6000			4500 2500 1000	282,130 00 378,830 00 54,664 00 16,190 00	
700	6700	370	1200	2000	47000		1100		51000	80000		8000	731,814 00	
	500				35000			40				30	8,332 00	-
5045	140600	3071	15435	€ <b>64</b> 000	1678000	717	16055	23930	99760	210740	84	36180	3,715,871 00	

8-9 EDWARD VII., A. 1909

# RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 2, New Brunswick, for the Year 1907-08.

Kinds of Fish.	Quantity.	Price.	Value.
Salmon, fresh.         Lb.           " preserved in cans         "           " smoked.         "           Herring, salted         Brls.           " fresh.         Lb.           " smoked.         "           " saked.         "           " salted.         Brls.           Lobsters, preserved.         Cans.           " in shell.         Cwt.	1,371,600 4,600 7,200 157,100 2,166,000 1,561,000 334,700 355 2,676,600 3,700	\$ cts. 0 20 0 15 0 20 4 50 0 01 0 02 0 12 15 00 0 30 6 00	274,320 690 1,440 706,950 21,660 31,220 40,164 5,325 802,980 22,200
Cod, dried         "           " tongues and sounds         Brls.           Haddock         Cwt.           Hake         "           " sounds         Lb.           Halibut         "           Trout.         "           Shad         Brls.	75,880 336 4,220 8,210 9,400 139,650 115,700 2,937	5 00 10 00 3 50 2 50 0 25 0 10 0 10 10 00	379,400 3,360 14,770 20,525 2,350 13,965 11,570 29,370
Smelts         Lb           Alewives         Brls           Bass         Lb           Eels         Brls           Oysters         "Clams           Clams         "           Flounders         Lb	8,297,500 5,045 140,600 3,071 15,435 36,180 664,000	0 08 4 00 0 10 10 00 6 00 4 00 0 03	663,800 20,180 14,060 30,710 92,610 144,720 19,920
Frost fish         "           Squid         Brls.           Coarse fish         "           Fish oil         Galls.           Fish as bait         Brls.           Fish as fertilizer         "           Seal skins         No.	$\begin{bmatrix} 1,678,000\\ 717\\ 16,055\\ 23,930\\ 99,760\\ 210,740\\ 84 \end{bmatrix}$	0 03 4 00 2 00 0 30 1 50 0 50 1 25	50,340 $2,868$ $32,110$ $7,179$ $149,640$ $105,370$ $105$
Grand total			3,715,871

## RECAPITULATION

Of the Number and Value of Vessels, Boais, Nets, Traps, &c., engaged in the Fisheries in District No. 2, **New Brunswick**, in the Year 1907-08.

Material.	Value.	Total.
239 fishing vessels (2,948 tons). 5,208	168,850 342,900 2,785 800 137,000	\$ Cts
180 lobster canneries		767,025
201 freezers and ice-houses. 448 fish and smoke-houses. 51 piers and wharfs. 79 tugs and smacks. 1,023 smelt shanties.	46,300 42,600 23,500	346,800 212,650
Totals	-	1,326,475

# DISTRICT No. 3, NEW BRUNSWICK, 1907-08.

RECAPITULATION of the Fisheries product in the Inland Counties of New Brunswick.

Kinds of Fish.	Quantity.	Price.	Value.
Salmon         Lb.           Shad, fresh         "           " salted         Brls.           Whitefish         Lb.           Trout         "           Bass         "           Pickerel         "           Alewives, fresh         "           " salted         Brls.           Sturgeon         Lb.           Eels         Brls.           Mixed and coarse fish         "	36,100 62,000 410 5,600 66,700 2,000 42,200 43,000 1,350 9,500 16	\$ cts.  0 15 0 05 10 00 0 15 0 10 0 08 0 07 0 02 3 00 0 08 10 00 2 00	\$ cts. 5,415 00 3,100 00 4,100 00 840 00 6,670 00 160 00 2,954 00 860 00 4,050 00 760 00 708 00
Fish Products.			29,777 00
Caviare	350	0 90	315 00
			30,092 00

# RECAPITULATION of the Fishing Material District No. 3, New Brunswick.

Material.	Number.	Value.
Men employed . Vessels (tonnage, 30) Boats. Gill-nets (fathoms, 50,750). Rods and lines. Eel traps Cottages, smoke and ice-houses and freezers  Total.	1,331 2 890 2,000 1,775 25 174	\$ cts. 400 00 10,910 00 18,620 00 4,488 00 25 00 10,405 00 44,848 00

RECAPITULATION showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials in the Province of New Brunswick, for the Year 1907-08.

RECAPITULATION showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials in the Province of New Brunswick, for the Year 1907-08—Concluded.

ERIES.	Tugs, steamers & smacks.	Number.	<b>\$</b> \$	33 31195		11 5500 11 2500 18 6000 44 6800 5 2700			112 54695
OTHER FIXTURES USED IN FISHERIES.		Value,	<del>***</del>	79610		2400 5500 10000 24500 200			332 136610
	Piers and wharfs.	Number.		204		12 17 17 20 1			
	Smoke and Fish houses	Value.	€	676 134285 101 32400	100	4 4 4 4			383 152555 1225 212985
	Sm an Fish	Number.			G	185 14 117 126 3			1225
THER I	Freezers and Ice-house.	.anlæV	6/9	1700		. 6100 13400 24400 19100 16500		3300 4000 350 755	152555
0	Free ar Ice-h	Number.		्राठ क		210 210 210 20 20 20 20 20 20 20 20 20 20 20 20 20		35 35 35 35 35	
		Persons employe		20		1450 705 235 1380 40			3860
ANT.		Yalue.	60	17909		300 35000 34700 17000 16000 13500 16000 16			184 114600 289951 265824 3860
LOBSTER PLANT.	Traps.	Number.		19746					289951
Lobst	Canneries.	Value.	€€	11500		17000 17900 10000 55600 2600			114600
	Canı	Number.		4 :					
rs.	nd es.	Value.	<b>\$</b> ⊕	2275 105		105 570 185 3300 10		1423 400 1500 100 565 500	11038
ateria)	Hand Lines.	Number.		3058		300 1770 205 4570 60		645 200 375 50 50 255 250	11866
OR M.	Smelt- nets.	Value,	¢/⊋			10800 25700 80000 13700 6800			264600 2357 137000
FEAR		Number.		- ; ;		251 625 1065 293 123			2357
FISHING GEAR OR MATERIALS.	irs.	Value.	6/9	372 247450 32 17150					264600
FIS	Weirs	Number.		372					404
		Counties.	District No. 1.	1 Charlotte	District No. 2.	3 Albert 1 Westmorland 5 Kenthuberland 6 Northuberland 7 Gloucester 8 Restigouche.	District No. 3.	9 Victoria. 10 Carleton 11 York. 12 Sunbury 13 Queens.	100 to 10
		лэбти.		1 Charle 2 St. Jo		3 Alber 4 Westh 5 Kent 6 North 7 Glouc 8 Restin		9 Victoria. 10 Carleton 11 York 12 Sunbury 13 Queens.	Burar Fr

RECAPITULATION showing the Kinds and Quantities of Fish and Fish Products in the Province of New Brunswick, for the Year 1907-08.

	Number.	- 6 -	0000 84700F8		50
	Halibut, Ib.	13600	4650 5000 130000		25860 153250
	Pollock, cwt.	25770			
	Hake sounds, lb.	29484			45784
	Hake, dried, cwt.	30382	60 2050 820 5200 80		46242
	Haddock, smoked finnan haddies, lb.	686 108300			4906 108300
	Haddock, dried, cwt.	686	300 2200 1720		4906
	Haddock, fresh, lb.	1357500			1486200
	Cod tongues and sounds, bris.	:::	9330		336
ř	Cod, dried, cwt.	*4984	210 1590 1980 72100		80922
F Fist	Lobsters, fresh in shell, cwt.	7077	200 1450 440 250 1050 310		12401
KINDS OF FISH.	Lobsters, preserved in cans, lb.	54412	1000500 488500 200000 948800 38800		2731012
	Mackerel, salted, brls.	::	290 20 20 45	: : : : : : : : : : : : : : : : : : : :	355
	Mackerel, fresh, lb.	: :	7700 196500 44500 86000		334700
	Herring, smoked, lb.	*3945700	1280000 5000 50000 226000		5556700 334700
	.dl ,fresh, lb.	20000	12000 590000 392000 97000 625000 450000		21.86000
	Herring, salted, brls.	2210 250	320 30620 30620 14160 80000 1380		15200 159560
	Salmon, smoked, lb.	0008	1000 4000 22200		
	Salmon, preserved in	::	 1200 2400 1000		4600
	.dl ,fresh, fromla?	7000	5000 15200 12300 520000 472000 2400 236400 1000	3500 21000 1000 8000	1837700 4600
	COUNTIES.	District No. 1. 1 Charlotte	District No. 2.  Albert  Westmordand  Kent.  Onrhumberland  Gloucester  Restigouche	District No. 3. 10 Carleton 11 York 12 Sunbury 13 Queens.	

\* See recapitulations.

RECAPITULATION showing the Kinds and Quantities of Fish and Fish Products in the Province of New Brunswick, for the Year 1907-08—Continued.

	TOTAL VALUE OF ALL FISH.	& cts.	1,350,669 00 203,932 00		8,332 00 731,814 00 633,556 00 801,741 00 1,438,673 00 101,755 00		3,233 00 9 1,225 00 10 7,335 00 11 2,550 00 12 10,724 00 13 5,025 00 14	5,300,564 00
	Seal skins, No.		: :		168		* * * * * *	84
	Fish as manure, brls.		2040		\$0000 33000 26200 71000 540			313195
	Fish as bait, brls.		24073		51000 10700 7050 30800 210			58805 124315 213195
	Fish oil, galls.	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	31130 3745		40 1170 120 22600			
	Coarse and mixed fish, bris,		: :		1100 9680 3000 2180 95		100 100 25 77 70	16409
	Squid, bris.		354		712			1071
	Tom cod or frost fish,				35000 47000 155000 1220000 186000 35000			84123 668000 1678000 1071
	Flounders, lb.		4000		20 2000 1160 54000 700 440000 6300 100000 68000			000899
F FISH.	Clams, brls.		*47943		20 8000 11160 700 16300			84123
KINDS OF FISH	Oysters, brls.				1200 4665 8600 970	v		15435
M	Sardines, brls.	*	246644 5625					42200 3287 252269
	Eels, brls.		200		75 370 720 1040 804 62		9 : : : : 0	3287
	Pickerel, lb.				* * * * * * * * * * * * * * * * * * *		10000 4000 23200 5000	
KINDS	Bass, lb.		: :		500 6700 16900 93500 23000		2000	19528 142600
	Alewives or gaspereau, bris.		13133				* 35 500 715 100	,
	Smelts, lb.		46500		810000 810000 1526000 4620000 1086000 249500			8349000
	Shad, brls.	1	899		120 1485 122 1100 110		* : : : : : : : : : : : : : : : : : : :	4015
	Trout, lb.		₹000		9500 23200 10400 35500 27600 9500		16800 10000 29000 1000 1900 8000	186400
	Countes.	District No. 1.	Charlotte	District No. 2.	3 Albert. 4 Westmorland 5 Kentt. 6 Northuberland. 7 Glouester. 8 Restigouche.	District No. 3.	9 Victoria. 10 Carleton. 11 York. 12 Sunbury. 13 Queens. 14 Kings.	Totals

See recapitulation.

# RECAPITULATION

Of the Yield and Value of the Fisheries in all New Brunswick, for the Year 1907-08.

Kinds of Fish.		Quantities.	Value.	Total.
			\$ ets.	\$ cts.
Salmon fresh	lb. lb. lb.	1,837,700 15,200 4,600	344,235 00 3,040 00 690 00	
Herring salted.  "fresh. "smoked. "boneless.	orls. lb. lb.	159,560 2,186,000 5,556,700 263,190	716,790 00 21,860 00 151,091 00 26,319 00	347,965 0
Mackerel, freshsalteds	lb.	334,700 355	40,164 00 5,325 00	916,060 0
Lobster preserved cans	lb.	2,731,012 12,401	819,303 60 109,210 00	45,489 0
Cod, dried	ewt.	80,922 202,800	404,610 00 8,112 00	928,513 6
" tongues and sounds	lb.	336 1,486,200 4,906	$ \begin{array}{r} 3,360 \ 00 \\ \hline 44,586 \ 00 \\ 17,171 \ 00 \end{array} $	416,082 0
" (finnan haddies)	lb.	108,300	6,498 00	68,255 0
" sounds	lb.  cwt. lb. lb. brls.	25,860 153,250 186,400 4,325	20,542 00	$\begin{array}{c} 136,147 & 0 \\ 77,580 & 0 \\ 15,325 & 0 \\ 18,720 & 0 \\ 44,920 & 0 \end{array}$
Smelts Alewires Bass Eels Whitefish	lb. brls. lb. brls. lb.	8,349,000 19,743 142,600 3,287 5,600		667,93 90,75 14,22 32,87 84
Pickerel	lb. lb. lb.	42,200 9,500 350	760 00 315 00	2,95
Sardinescanned	brls. cans.	252,269 5,700,000	378,403 50 285,000 00	1,075 0
Flounders. Frost Fish ysters Plams, quahaug and scallops canned shelled	lb. lb. brls. brls. eans. galls.	668,008 1,678,000 15,435 86,688 693,544 4,040	223,849 50 69,354 40 2,020 00	$\begin{matrix} 663,403 & 5 \\ 20,040 & 0 \\ 50,340 & 0 \\ 92,610 & 0 \end{matrix}$
Squid  Coarse fish  Fish oil  as bait  fertilizer  Seal skins	brls. brls. galls. brls. brls. No.	1,071 16,409 58,805 124,315 213,195 84		295,223 9 4,284 0 32,818 0 17,641 5 186,472 5 107,825 0
Oulse	lb.	68,300	· · · · · · · · · · · · · · · · · · ·	4,098 0 5,300,564 0 4,905,225 5

## RECAPITULATION

Or the Number of Fishing Crafts, Nets, &c., in the whole Province of New Bruns-wick, for the Year 1907-08.

Articles	Number.	Value.	Total.
		\$ ets.	\$ cts.
Fishing vessels (4,804 tons)boats	343 7,804	169,170 305,079	47.4 9.40
Fathoms of gill-nets  n of seines.  Smelt-nets  Bass nets  Weirs  Trawls  Eel traps.  Hand lines and rod and lines.	878,720 13,935 2,357 123 404 938 25 11,866	398,863 29,235 137,000 800 264,600 9,486 25 11,038	47 <b>4</b> ,249 851,047
Lobster canneries	184 289,951	114,600 265,824	000.40
Ice houses and freezers. Fish and smoke houses Fishing piers and wharfs  fully tugs and smacks Smelt shanties Fish and clam factories Pile-drivers and scows.	383 1,225 332 112 1,023 13 251	152,555 212,985 136,610 54,695 20,750 43,500 5,640	380,424 626,735

STATEMENT of the number of men engaged in the Fisheries of New Brunswick 1907-08.

Number of	of men in fishing vessels	1,307
11	boats	13,012
11	persons employed in lobster canneries	3,860
		70.750
	Total	18,179

# APPENDIX No. 4.

# PRINCE EDWARD ISLAND.

REPORT ON THE FISHERIES OF THE PROVINCE BY INSPECTOR J. A. MATHESON.

CHARLOTTETOWN, March 25, 1908.

To the Dominion Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to submit herewith my report on the fisheries of the province of Prince Edward Island for the season of 1907, with synopsis from reports of Overseers, and statistics showing the quantities and values of the year's catch, and quantity and value of material used and the number of persons engaged in the industry.

#### LOBSTERS.

I am again pleased to report an increase in the catch of lobsters, — 550,201 lb. over the season of 1906, which is the largest catch for the past ten years, as shown by the following figures:—

1898		 	2,342,020 lb.	
1899		 	2,421,144 "	
1900		 	2,223,712 "	
1901		 	2,386,070 "	
1902	* * * *	 	2,039,600 "	
1903		 	2,355,400	
1904		 	2,501,100 "	
1906		 	2,289,288 11	
1907		 	2,839,489 "	

## OYSTERS.

In the oyster fishery there was a decline in the quantity of 5,316 barrels.

In my preliminary report I predicted that there would be a falling off of about fifty per cent in the catch. This has been verified by the report.

The largest shortage was in Prince county, especially in Grand river. It is difficult to ascertain the cause of such a large falling off, but I attribute it to overfishing, and the fishing of quahaugs in the vicinity of the oyster beds, causing the sediment to settle on the oysters and preventing the spawn from adhering to the shell.

For rivers where quahaugs are fished near oyster beds, I would recommend that a launch be provided and the beds be raked over the last of June or first week in July, in

order to clean them.

## MACKEREL.

I am pleased to report an increase in the catch of this fishery, of 1,267 barrels. The catch of mackerel has increased somewhat for the past two seasons and a good many fishermen are of the opinion that the mackerel are again returning to our shores, where once they were so abundant.

COD.

There has been a decrease in the catch of cod over the previous season, a shortage of (dried), amounting to 2,589 cwt. This, I think, can be attributed in a great measure to the very stormy weather that prevailed during the fishing season, and prevented fishermen using small boats for fishing. A good many fishermen, particularly in Kings county, sought other employment.

#### HERRING.

Show an increase of about three thousand, eight hundred barrels of salted, which brought good prices.

#### QUAHAUGS.

The quantity of quahaugs taken, show no diminution from the very large quantity taken in the season 1906, and exceeds that season's catch by over three thousand bags.

The American market was overstocked and prices realized were unprofitable to shippers.

#### SMELTS.

There was a considerable quantity of this fish taken but the mild weather that prevailed during the season interfered with the marketing, and a great quantity of what was shipped did not reach it in good condition, and the returns were small.

Smelts were mostly sent to the New York markets.

#### TROUT.

About the same quantity of this fish was taken as last season, but fish is larger in size, and with the same care in the protection during the close season, I have no doubt that improvement will be still more noticeable in the future.

# SYNOPSES OF OVERSEERS' REPORTS.

Overseer Davison, Prince County, reports: In this county there is a small decrease in the catch of herring; on account of the ice remaining on the coast so long, fishermen could not get their nets out until about the 20th of May.

Mackerel show a small increase. They seem to be returning to our shores in large

numbers each year.

The catch of lobsters on the south side of the island was about the same as last year, but on the north side, I am pleased to report a large increase.

Cod show an increase on the coast of Prince county. I attribute it to the number

of fishermen induced by the higher price of this fish.

There was a large increase in the quantity of smelts due to the more general use of gill-nets.

Oysters have decreased by more than half, and fishermen ascribe the cause to the large numbers of starfish that destroy the oysters.

The increase of quahaugs is due to more persons being engaged in this fishery.

Overseer McCormack, King's County, reports as follows:

Lobsters, although one of the shortest seasons in the history of this fishing, it was one of the most successful, both for packers and fishermen.

The first lobsters were packed on the south side on the 4th of May, and about the 15th May the ice came back around east point and stopped all fishing for one week.

On the north side the first packed was on the 24th May, with very good weather, and fishing continued to the end of the season with an increase in the pack of 2,344 cases.

Cod and Hake.—Owing to this branch of the fishery being good in 1906, greater preparation was made to prosecute it. Eleven more vessels were licensed than last year, also more boats, but the weather was very stormy from July to December. Very few fish were caught after the first of October by small boats. So much loss of time discouraged the fishermen who sought other employment.

Herring were very plentiful up to the end of July, especially at Georgetown, and

show a considerable increase in this county.

Smelts,—This fishing may be called a failure, owing to the mild weather and the

poor condition they reached market.

Owing to the fact that a number of persons were fined for illegal lobster fishing in the southern part of the county the previous year, very little was attempted to be done illegally this season, and with the aid of the cruiser *Petrel*, I destroyed about 130 traps near Georgetown.

I have the honour to be, sir,
Your obedient servant,
J. A. MATHESON, Inspector of Fisheries.

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the County of Kings, Province of Prince Edward Island, for the year 1907.

70 - 1		Number.		$\frac{1284700}{100}$
KINDS OF FISH.	.dl	Salmon, fresh, l		20000
2	ps.	Value.	60	5000 3000 11200 11000 17000 6000 5000 2000 77000
LOBSTER PLANT.	Traps.	Number.		6500 4500 17000 17000 29000 14000 19000 9000 66000 3000
OBSTE	Canneries.	Value.	₩	3000 2000 6000 4000 4000 4000 4000 4000 4
ĭ	Canı	Number.		420004-1-04-1-
	Smelt nets.	Value,	<b>6</b>	160 160 160 1100 1150 800 800 250 250 1845
rs	Sm	Number.		20 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
FISHING GEAR OR MATERIALS.	wls.	Value,	<b>69</b>	600 500 1000 1500 1000 800 800 800 1000 3780
B OR N	Trawls	Number.		60 10 50 10 10 10 40 8 8 8 8 8 10 8 8 10 8 10 10 10 10 10 10 10 10 10 10 10 10 10
G GEA		Value.	₩	2400 400 3000 4000 2500 2000 1500 1600 1500 1600
Fishin	Gill-nets	Fathoms.		4500 6000 8000 8000 5000 1000 1200 2000 34800
	5	Number.		300 60 500 300 250 250 100 150 2360
	Vessels. Boats.	Men.		120 115 116 60 116 116 84 84 84 50 100 136 136 136 136 136 136 136 136 136 136
BOATS.		Value.	<b>6</b> £	1200 800 1000 2500 1000 600 1500 1500 500 500
CNA		Number.		65 440 440 448 888 888 880 550 550 550 550 550 550 55
Fishing Vessels and Boats.		Men.		39
NG VE		Value.	<b>9/</b> ₽	4000
Fishi		Tonnage.		153
		Number.		10 5  29 
		Distrious,	Kings County.	1 Souris and Red Point 2 Bay Fortune 3 Annandale 4 Georgetown 5 Murray Harbour, North 6 Murray Harbour, South 7 Morell and St. Peters. 8 Nanfrage. 9 North Lake 10 South Lake Totals. 7 Values 8 Values

RETURN showing the kinds and quantities of Fish and Fish Products in the County of Kings, Province of Prince Edward Island, for the year 1907—Continued.

	H Zumber.	σα̈́	00 00 00 00 00 00 00 00 00 00
	TOTAL VALUE OF ALL FISH.	\$ cts.	45, 586 17, 237 45, 730 51, 942 57, 374 57, 374 65, 670 88, 640 37, 251 20, 708
	Fish as bait, brls.		1000 500 800 2000 1500 11500 1200 800 700 400 9900
	Fish oil, gall.		60 200 10 200 20 300 10 100 10 100 10 200 10 200
	Coarse and mixed fish,		100 100 100 100 100 100 100 100 100 100
	Canned clams, cases:		150 350 350
	Clams, brls.		
•	Quahaugs, bags.		200 200
	Eels, bris.		
	Alewives or Gaspereau,		
	Smelte, lb.		
	Trout, lb.		2000 2000 1000 2000 2000 1000 1000 500 1000 500 500 500 500 5
Fish.	Høke, sounds, lb.		·   -
IDS OF	Hake, dried, cwt.		3000 1100 1150 3000 3000 1000 50 50 50 50 50 50 50 50 50 50 50 50
KIR	Haddock, dried, cwt.		
	Haddock, fresh, lb.		1000 2000 2000 2000 500 500 500 540
	Cod, tongues and sounds, brls.		
	Cod, dried, cwt.		1400 250 200 200 600 350 1150 1000 450 400 600 600
KINDS OF FISH.	Lobsters, preserved in cans, lb.		-
	Mackerel, salted, brls.		120 10000 100 10000 100 100 100 100 100 10
	County   C		
	Herring, salted, brls.		250 100 150 350 350 100 100 1550 1550
	Districts.	Kings County.	1 Souris and Red Point. 2 Bay Fortune 3 Annandale. 4 Georgetown. 5 Murray Harbour, North. 6 Murray Harbour, South. 7 Morell and St. Peters. 8 Naufrage. 9 North Lake. 10 East Lake. Totals. Totals.

RETURN showing the kinds and quantities of Fish and Fish Products in the County of Queens, Province of Prince Edward Island, for the year 1907.

		Number.		1004007000
	ted, brls.	Mackerel, sal		650 700 1300 2650 39750
KINDS OF FISH.	.dl ,ds	Mackerel, fre		500 30000 4500 25000 20000 20000 45000 175000 450 9000
O SUNI	·qI 't	Herring, fresh		
X	slid ,be	Herring, salte		2000 1400 150 4000 250 250 9800 49000
T.	·sd	Value.	<b>60</b>	6700 5025 7100 6300 5180 4500 38405
Lobster Plant.	Traps.	Number.		12000 9250 12880 13300 6100 6100 880 64520
GESTE	Canneries.	Value.	€₽	8000 2775 3520 5500 2150 3400 3400
	Canr	Number.		4 7 12 4
	Smelt nets.	Value.	60	915 70 630 385  140 915 915 3300
	Sm	Number.		29 111 111 29 29 29 1100 1100 1100
LS.	wls.	Value,	₩	300
ERIA	Trawls.	Number.		145
MAT		Value.	60	600 1500 600 1500 600 1500 600 1500 600
AR OR	Seines.	Esthoms.		<u> </u>
G. G.		Number.		(C) 4 :
FISHING GEAR OR MATERIALS.	×.	Value,	6/9	3000 2500 160 1200 75 
	Gill-nets.	Fathoms.		6000 3000 100 5000 100 125 2000
		Number.		300 250 200 200 200 200 100 100 100
Ts.		Men.		250 1100 1160 290 9 60 75 60 156 80 1240
ID Boa	Boats.	Value.	₩	4500 25000 26000 26000 1500 4000 15700 15700
ESSELS AND BOATS.		Number.		150 050 050 120 120 120 120 120 120 120 120 120 12
		Total fisher- men.		27
FISHING V	Vessels.	Value.	€€	60 1270 60 1270 30
ISHU	Ve	Tonnage.		
1		Number.		
	Drembyong		Oueens County	1 Tracadie 2 New London 3 Point Prim 4 Rustico 5 Wheatley River 6 Pownal 7 Charlottetown 7 Charlottetown 9 Lot 65 10 Bays and Kivers Totals Values\$
17		Number.	1	1984595000

SESSIONAL PAPER No. 22

RETURN showing the kinds and quantities of Fish and Fish Products in the County of Queens Province of Prince Edward, Island for the year 1907.

	Total Total Fish.	s cts.	111,232 75 72,139 80 39,165 00 126,403 40 6,392 50 15,749 80 12,249 80 12,245 60 22,245 60 11,243 00	04 (0,479 40
	Fish as manure, bris.			2400
	Fish as bait, brls.		3000 2312 3320 3322 1522 1522 2200 200 18304	
	Fish oil, galls.	1		1102
	Coarse and mixed fish,			113
	Tom cod or Erost fish,			113
	Quahaugs, bags.			76800
	Clams, bris.		150 100 100 100 100 100 100 100 100 100	1180
	Oysters, brls.		2000 80 910 300 1100 150 4690	22002 2000 6000 37520 1180
Fish.	Eels, bris.		250 30 1120 1120 1175 600	0009
	Alewives or Gaspereau, brls.		2500	2000
KINDS OF	Smelts, lb.			
	Trout, lb.	¥		1300
	Pollock, ewt.			20
	Hake, sounds, lb.		7::::::::	25
	Hake, dried, cwt.	i 		737
	Haddock, dried, cwt.			785
	Haddock, fresh, lb.		31 :21 : :   82	714
	Cod, tongues and sounds, byls.		: : : : : : :	5 430
	Cod, dried, cwt.		2200 400 75 3750 1000 7425	37125
	Lobsters, fresh shell,		20 20 300 300 300	2100
	Lobster, preserved in cans, lb.		133440 140976 69600 181968 31056 58512 58992	\$ 202363
	Distrits.	Oueens County.	1 Tracadie. 2 New London 3 Point Prim 4 Rustico 5 Wheatley River 6 Pownal 7 Charlottetown 9 Lot 65.	Values

8-9 EDWARD VII., A. 1909

Return showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the County of **Prince**, Province of **Prince Edward Island**, for the Year 1907.

		Number.		<u> </u>		
KINDS OF FISH.	.dl	Herring, fresh,		16000 2100 5000 5000 5000 1000 1000 2000	42600	426
Kin	prls.	Herring, salted,		1000 1745 620 620 975 975 125 125 125 125 125 125 125 125 125 12	5526	27630
ī.	s.	Value.	€€	1445 585 6100 554 6100 554 6100 700 700 700 700 700 700 700 700 700	:	91455
R PLAN	Traps.	Number.		22800 5550 10600 7140 3800 5000 7200 7200 1820 6100 4480 6500 5800 5800 5800	122970	
LOBSTER PLANT	Canneries.	Value.	<b>%</b>	2350 2150 6500 4500 3350 2300 1100 11160 1700 1700 1800 1830 3800 1830		43290
-	Cann	Number.		77 8 70 74 4 14 40 10 11 10 10 10 10 10 10 10 10 10 10 10	84	<u> </u>
		Value,	€	730 1120 1120 1120 1120 1200 1200 400 400 400	:	2670
	Smelt nets.	Number.		4 : 440 20 20 8 : 002 F-2	117	:
IALS.	wls.	Value.	<b>€</b> €	100 100 100 100 100 100 100 100 100 100		. 1035
ATER	Trawls.	Number.		30 30 30 30 30 30 30 30 30 30 30 30 30 3	117	
B M	zů	Value.	Ø.	10000		2500
AR C	Seines	Fathoms.		0.000	1250	
G.		Number.		ана : : : : : : : : : : : : : : : : : :	50	:
Fishing Gear or Materials	Gill-nets.	Value,	6€	350 4417 6655 6655 6655 673 377 377 377 995 995 995 995 995 995 995 995 995 9	:	11379
F		Fathoms.		1400 12400 1300 1080 3364 1730 2000 310 11175 3087 730 730 730 1400 1400 1250 1250 1250 1250 1250	42746	:
		Number.		433 70 70 71 1112 1115 1105 120 120 120 1118 75 75 75 75 75 75 75 75 75 75	2143	:
TIS.	Boats.	Men.	,	20 60 60 60 60 60 60 60 60 60 60 60 60 60	1268 2143	:
FISHING VESSELS AND BOATS		Value.	69	7350 1385 11820 1310 1015 625 1000 740 625 625 4920 650 600 600 600 600 600 600 600 600 60	:	28255
LS AJ		Number.		983 882 100 100 100 100 100 100 100 100 100 10	702	:
ESSE		Men.		:22	27	:
NG V	Vessels	√slue.	₩	140 3200	:	3800
IBHI,	\ \	Tonnage.		140	158	:
<u> </u>		Number,		:ω · · · · · · · · · · · · · · · · · · ·	9	:
	FISHING DISPRICES		Prince County.	1 Tignish. 2 Alberton 3 Nail Pond 4 Skinner's Pond 5 Miminegash. 6 Narrows, Lot 11 7 Ellerslie, Lot 12 8 Bideford 9 Grand River 10 Malpeque 11 Richmond Bay 12 Roxbury, Lot 6 13 Fifteen Point 14 Brae. 15 West Point 16 Travellers Rest 17 Summerside 18 Carleton 19 Tryon	Totals	Values

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Prince, Province of Prince Edward Island, for the Year 1907.

5 7	تب		
TOTAL VALUE OF ALL FISH.	e cts.	68,665 0C 44,025 36,693 20 45,0693 20 36,693 20 37,824 95 118,740 00 18,740 00 19,740 00 11,740	599,344 85
Fish as manure, brls.		300 75 75 75 75 75	425
Fish as bait, bris.		4000 4000 1956 1956 1050	34936
Fish oil, galls.		450 655 625 525 125 125 125	62250
Coarse and mixed fish, bris,		25.	50
Quahauga, baga.		90000 12000 12000 12000 154 11332 34686	69372
Oysters, brls.		800 1300 1300 1300 4000 700 700 700 700 700 700 700 700	39856
Eels, brls.		0 : : : : : : : : : : : : : : : : : : :	009
Smelts, lb.		4000 132500 2800 2200 4100 4000 4000 4000 4200 10000 1	18540
Trout, lb.		320 300 820 820	82
Hake, sounds, lb.		2800 500 8650 360 1493 5803	1450
Hake, dried, cwt.		3000 8800 1129 7734 100 3000 2723	8169 1450
Haddock, dried, cwt.		350	1225
Haddock, fresh, lb.			639
Cod, dried, cwt.		800 315 1800 272 626 150 20 20 20 15 15 15 15 15 20 4578	22890
Lobsters, fresh in shell, cwt.			2940
Lobsters, preserved in cans, lb.		153600 60576 60536 890634 890634 7616 33600 5760 63904 22560 63400 63400 5654 44112 108288	341381
Mackerel, salted, brls.		340 647 195 156 224 44 20 20 111 10 10	26250
Mackerel, fresh, lb.		15000	1860
Fishing Districts.	Prince County.	gnish berton all Pond timer's Pond timer's Pond arrows, Lot 11 lerslie, Lot 12 lerslie, Lot 12 lerslie, Lot 12 chend River alpeque (chend Bay oxbury, Lot 6 fiften Point free Point ravellers Rest unmerside. arlefon. Tyon Totals.	Values
TAUMDEL:		20 4 7 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Mackerel, fresh, lb. Mackerel, salted, brls. Cans, lb. Cod, dried, cwt. Haddock, fresh, lb. Hake, anied, cwt. Hake, anied, cwt. Hake, anied, cwt. Hake, anied, cwt. Goarse and mixed fish, Drls.  Coarse and mixed fish, Drls.  Wish as bait, brls.	Price County  Mackerel, fresh, lb.  Mackerel, salted, brls.  Lobsters, preserved in God, dried, cwt.  Haddock, dried, cwt.  Hake, dried, cwt.  Hake, dried, cwt.  Hake, sounds, lb.  God, dried, cwt.  Hake, sounds, lb.  Trout, lb.  Smelts, lb.  Goarse and mixed fish, brls.  Coarse and mixed fish, brls.  Fish oil, galls.  Fish as bait, brls.	Tight of the Figure   Treat, the first of the Figure   Treat, the first of the Figure   Treat, the first of

8-9 EDWARD VII., A. 1909

		F	SHING	VESS	ELS A	FISHING VESSELS AND BOATS	ATS.				FISHI	FISHING GEAR OR MATERIALS.	EAR	M ac	ATER	[ALS.				
	DISTRICTS,		Vessels.	. s		Boats.	sts.	5	Gill-nets		Ø.	Seines.		Trap- nets.	-	Trawls.		Smelt- nets.	Hand- lines.	.d-
Zumber.	:	Number.	Tonnage.	Value,	Men.	Number.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value,	Number. Value.	Number.	Value.	Number.	Value.	Number.	Value.
1 Kings. 2 Prince. 3 Queens	Counties.	29	662 1 158 130	\$ 17500 3800 3270	123 5 27 7 43 6	543 109 702 282 655 157	000	1	34800 42746 16325	\$ 19700 11379 7535	5 1250 11 1600		\$ 2500	\$ 11500 20 175		378 3780 117 1035 175 900		\$ 1845 2670 3300	1125 435 1250	\$ 1125 251 625 625
Totals		42	950 3	24570	193 19	1960 548	54855 3401	2408	93871	38614	16 2850		0000	21 1675	2 670	0 5715	1	423 7815 2810	2810	2001
					Lobst	LOBSTER PLANT	ANT.				Отн	OTHER FIXTURES USED IN FISHERIES.	IXTOR	ES US	ED IN	Fisi	FERIE	. හර		
	Districts,		Can	Canneries.		Traps.	ps.	ployed ries.	1	Freezers and Ice-houses.	200	Fish	Smoke and Fish Houses.		and V	Piers and Wharfs	. 702	Ste and S	Tugs, Steamers and Smacks.	80
Number			Number.	Value.		Number.	Value.	me snosve ennsO ni	Number.	Value,		Number,	Value.	100000	Number.	Value.		Number.	Value,	Number.
	Counties.			99			<b>9</b> €			₩			<del>\$\$</del>			<del>69</del>			<b>∜</b>	
Kings 2 Prince 3 Queens			84 51	43290 28645		11850 122970 64500	77000 91455 38405	816 823 1016			2000 1950 1500	110	:	765	1198		2650 6500 500	<u> </u>		3600 3400 2 3000 3
Totals		:	184	112935	1	305990	206860	2655		1 20	5450	116		29.65	06		9650	10		1000

SESSIONAL PAPER No. 22

# RECAPITULATION

Showing Yield and Value of the different Fisheries of the Province of Prince Edward Island, during the Year 1907.

Kinds of Fish.	Quantity.	Price.	Value.
		\$ cts.	\$ c
Salmon, fresh Lb.	5,000 [	0 20	1,000 0
Herring, saltedBrls.	16,876	5 00	84,380 0
freshLb.	217,600	0 01	2,176 0
m smoked	160,000	0 02	3,200 0
Mackerel, fresh	90,500	0 12	10,860 0
saltedBrls.	5,120	15 00	76,800 0
Lobsters, cansLb.	2,839,489	0 30	851,846 7
fresh in shell	720	7 00	5,040 0
Cod, dried	18,403	5 00	92,015
Fongues and soundsBrls.	93 1	10 00 [	930 0
Haddock, freshLb.	53,100	0 03	1,593
driedCwt.	1,575	3 50	5,512 5
Hake, dried	10,918	3 00	32,754
soundsLb.	21,803	0 25	5,450 7
PollockCwt.	20	2 50	50 (
FroutLb.	22,820	0 10	2,282
Smelts	900,850	0 05	45,042 5
Alewives or GaspereauBrls.	570	4 00	2,280 (
Eels"	738	10 00	7,380 (
Oysters Brls.	9,672	8 00	77,376
Clams	510	4 00	2,040 (
Clams in cases	350	5 00	1,750
QuahaugsBags.	48,286	2 00	96,572
Frost fishLb.	425	0 03	12 7
Coarse and mixed fish Brls.	305	2 00	610 (
Fish oil Galls.	12,250	0 30	3,675
Fish as bait	51,495	1 50	77,242
Fish as manure	2,825	1 00	2,825
			1,492,695

6,249

SESSIONAL PAPER No. 22

## RECAPITULATION

Showing the Number and Value of Vessels, Boats, Nets, Lobster Canneries, Traps &c., used in Fisheries of the Province of Prince Edward Island, for the season of 1907.

Articles.	Value.	Total.
42 Fishing vessels (950 tons) 1,900	\$ 24,570 54,855 38,614 6,500 1,675 5,715 7,815 2,001	\$
184 Lobster canneries. 305,990 Lobster traps	112,935 206,860	141,745 319,795
6 Freezers and ice-houses 116 Smoke and fish houses 20 Piers and wharfs 19 Steamers and smacks	5,450 2,265 9,650 10,000	27,365
Total		488,905

Number of persons employed in the fisheries of Prince Edward Island :--

193 3,401 2,655

# APPENDIX No. 5.

# NOVA SCOTIA.

District No. 1.—Comprising the four counties of the Island of Cape Breton. Inspector A. C. Bertram, North Sydney.

District No. 2.—Comprising the counties of Cumberland, Colchester, Pictou, Antigonish, Guysborough, Halifax and Hants.

Inspector Robert Hockin, Pictou.

District No. 3.—Comprising the counties of Kings, Annapolis, Digby, Yarmouth, Shelburne, Queens and Lunenburg.

Inspector A. C. Robertson, Barrington Passage.

# DISTRICT No. 1.

NORTH SYDNEY, N. S., June 10, 1908.

To the Dominion Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to submit herewith the annual report on the fisheries for District No. 1, which comprise the four counties of Cape Breton Island, for the fiscal year ending March 31, 1908.

Without exception this year has been the most unfavourable on record in the successful prosecution of the fisheries. The season was a month later than any previous year during the past twenty-five. The Island of Cape Breton was surrounded by ice floes until June 15, thus making spring fishing practically an absolute failure.

Undoubtedly the most serious feature of the situation was the great loss sustained in the amount of gear destroyed. The loss was not confined to any particular locality,

but was general throughout Cape Breton.

In the aggregate, owing to unfavorable weather conditions, all the important branches of the fisheries were below the average, both in the value of the catch and the

quantity secured.

That there were fewer persons engaged this year in the prosecution of the fisheries, may be attributed to the unprecedented late season and the fact that the large industrial concerns in Cape Breton county offered tempting inducements to the wage earner for his labour, owing to the short season and heavy demand for the products of their plants. This, it can be readily understood, induced fishermen, who suffered great loss in gear, early in the season, to leave their regular vocation for more profitable employment.

The greatest drawback to the fishermen was the loss sustained in gear destroyed by drift ice. This loss was general along the entire coast line of Cape Breton Island. Some idea may be gained by the fact that in one section, the L'Ardoise district of Richmond county, it is estimated that over one thousand nets and one hundred and fifty thousand fathoms of rope were destroyed. This great loss in equipment before the season opened had a most disastrous effect. When the season really commenced the fishermen found themselves without equipment and without resources, and accordingly were unable to engage in their regular vocation to the same extent as heretofore.

The failure of the lobster fishery is attributed also to the late season and unfavourable weather conditions. While the pack was much below the average the great demand and the consequent high prices secured for lobsters, in a large measure alleviated

the loss sustained by reason of the scarcity of this important food fish.

A noticeable feature this year was the scarcity of dog-fish, the greatest enemy our fishermen have to contend with during the summer season. That dog-fish did not frequent the coastal waters of Cape Breton Island to the same extent this year as heretofore is attributed to the unusually low temperature of the water.

The statistics on another page covering District No. 1, will furnish in detail the quantity, variety and value of the fisheries as well as the quantity and value of the

equipment used in the prosecution of the fisheries.

The regulations have been well observed. The tendency to poach has not been as great of late years as formerly.

# SYNOPSES OF REPORTS OF FISHERY OVERSEERS FOR THE ISLAND OF CAPE BRETON, 1907.

Overseer D. F. McLean, of Port Hood, reports an increase of catch in the following branches of the fisheries in the Western division of the county of Inverness: salmon, herring, lobsters, haddock and smelts and a decrease in mackerel, cod, hake, trout, eels and squid. It is gratifying to note that the aggregate catch in all branches shows an increase in value to a very material extent. About one fifth of the year's catch was used for home consumption, two fifths sold in Canada and the remainder exported to other countries.

Overseer William AuCoin, Eastern Harbour, reports fishing operations considerably retarded during the first few weeks of the season this year owing to drift ice. Operations did not really commence before May 15th. Herring were plentiful during the latter part of May and the first two weeks in June. The late spring materially interfered with the early prosecution of lobster industry. While there was a small decrease in canning operations, the market was exceptionally favourable and comparatively no loss was sustained by the fishermen and operators. The mackerel fishery was practically an absolute failure this year. These valuable fish seem to be growing scarcer each succeeding year. Hand-line fishing in this branch was an absolute failure. This falling off is due, in a large measure to the destructive pest, dog fish. The salmon fishery was up to the average. While a less number were taken the fish were exceptionally large and more profitable. The excellent protection afforded during the past year made illegal fishing impossible, and it is pleasing to note that not a single instance of poaching was reported.

Overseer Peter Gillies, of South West Port Hood, reports an exceptionally good catch of lobsters. More were exported from this district than in any other previous year. All other branches of the fisheries were equally good. The scarcity of bait was noticeable, but notwithstanding this drawback it may be said that all branches of the fisheries were above the average.

#### RICHMOND COUNTY.

Overseer Archibald Morrison, of River Bourgeois, reports a large increase in herring but a marked decrease in the catch of codfish. The decrease in this important branch may be accounted for from the fact that fewer fishermen were engaged this year in the prosecution of the industry than heretofore. The lobster canning operations, while smaller this year than in 1906, were more profitable owing to a great demand for this product and consequent higher prices. Had it not been for the late season this would undoubtedly have been the most prosperous year in the history of the fisheries.

Overseer D. R. Boyle, West Arichat, reports that owing to the presence of drift-ice and unfavourable weather conditions a great loss occurred this year in the prosecution of the fisheries. Fishermen were particularly unfortunate in losing gear owing to the above causes. The fishermen of Petit DeGrat, Cape Auguet and other important stations were fairly successful during the fall and winter season, securing over 1,350,000 pounds

22 - 6

of cod, haddock and pollock, during a period extending from November 1st to January 31st. There was an increase in salmon, cod, hake, haddock and halibut. There was a decrease, however, in lobsters, herring, mackerel, pollock and alewives. What is probably the nucleus of an important industry was the effort to can clams. Upwards of 555 cans were put up, thus furnishing profitable employment to a large number of men during the slack season. While the number of fishing vessels remained the same there is a slight decrease in tonnage. Six men less were engaged in these vessels. On the other hand there is an increase of 22 boats and 25 boat fishermen.

Overseer Arthur Brymer, Lower L'Ardoise, reports a decrease in all branches of the fisheries with the exception of lobsters which show an average catch. The most noticeable decrease is in herring and mackerel which is largely due to the presence of drift ice. The fishermen lost heavily in gear, and it is estimated that about one thousand nets and one hundred and fifty thousand fathoms of rope were lost at the commencement of the season owing to drift ice. When mackerel struck in later the fishermen were without gear and proper fishing equipment. The prevailing high prices, however, for all kinds of food fish in a material measure alleviated the loss sustained in gear.

#### CAPE BRETON COUNTY.

Overseer A. R. Forbes, North Sydney, reports the fisheries three weeks later this year than the previous year. Lobsters were unusually scarce and as a result the total pack was considerably below the average. Herring, however were plentiful and brought fair prices, both fresh and salt. Mackerel were scarce and the yield was entirely consumed in the local market. Cod, haddock, halibut and pollock were plentiful off shore but small boats were unable to venture out far enough to fish them inshore, therefore, these branches were a failure. Fewer men were engaged this year in the prosecution of the fisheries than formerly. This was due to the demand for labour at the different industrial enterprises in the vicinity.

Overseer John McLean, of Gabarous Lake, reports an average catch in all branches of the fisheries with the exception of lobsters. In this branch the late spring, drift ice and boisterous weather seriously interfered with operations. Scarcity of bait was also a serious handicap to the successful prosecution of the fisheries during this year. However, the catch of cod, herring and mackerel was an average one and the high prices prevailing brought exceptionally good returns to the men engaged.

#### VICTORIA COUNTY.

Overseer Charles McRae, of West Middle River, reports an increase in the value of fish caught this year of approximately \$500, this notwithstanding that fewer men were engaged this year in the prosecution of the fisheries than the previous year.

Overseer Duncan Gillis, of Baddeck, reports a substantial increase in the total value of the catch over that of any previous year. Fish were plentiful and the prevailing prices contributed to make the past year one of the best the fishermen ever enjoyed in this district. The branches which show an increase are herring, mackerel, lobsters, cod and haddock, while trout smelts and cysters show a decrease. About 45 per cent was consumed locally and the balance disposed of in the home markets.

Overseer Alexander Morrison, of Wreck Cove, reports a decrease of 20 per cent in the catch of lobsters, 90 per cent decrease in herring and 100 per cent in salmon. Cod, pollock and haddock show an increase of about 75 per cent. The drift ice remained along the coast until June 18, thus seriously interfering with the spring fishing.

Overseer D. P. Montgomery, reports an increase over the previous year, in cod, haddock, pollock and herring. The catch of lobsters was fair. Mackerel fell below the average and dog-fish were plentiful and destroyed much valuable gear. The total catch in this district found a ready sale in the Canadian markets, only one car load being shipped to the United States.

I am, sir, your obedient servant,

A. C. BERTRAM,

Inspector of Fisheries.

## DISTRICT No. 2.

ANNUAL REPORT OF THE FISHERIES OF DISTRICT No. 2 NOVA SCOTIA, COMPRISING THE COUNTIES OF ANTIGONISH, COLCHESTER, CUMBERLAND, GUYSBOROUGH, HALIFAX, HANTS AND PICTOU.

The Dominion Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to submit my annual report on the Fisheries of District No. 2, Nova Scotia, together with tabulated returns of statistics, also schedules showing the increase or decrease of the catch of each kind of fish.

The estimated value of all the fish taken in the district is \$1,820,305 as compared with \$2,200,087 the estimated value of the catch of last year, or a shortage of about

17 per cent.

Of the deep-sea fishes there was a decrease in the quantity of haddock of about thirty-three per cent, of hake twenty-four per cent, of pollock of thirty per cent, of herring forty per cent, of mackerel thirty per cent. An increase in the catch of cod of nine per cent and halibut of twenty-eight per cent.

Of the anadromous fishes the catch of salmon was twelve per cent less than that

of last year but it is about the avereage catch of the past nineteen years.

On the Straits of Northumberland the catch was five per cent over that of last year. On the Atlantic coast it was fifteen per cent less than last year and it is notable that while in Guysborough county there was a decrease of twenty-five per cent, in Halifax there was a considerable increase.

On the Bay of Fundy in the counties of Cumberland, Colchester and Hants there

was a decrease of forty per cent.

The conditions of the rivers during the months of October and November, where salmon ascend for spawning purposes, were favourable to this fishery.

#### SHAD.

There is little or no improvement in the condition of this fishery, the catch for the

year being 402 barrels as compared with 374 for 1906.

The average catch for the past 19 years has been 1,200 barrels, but in Overseer Davison, of Colchester County's division, he has known 5,000 barrels to be taken twenty-five years ago.

The fish ascend the Shubenacadie and other rivers to spawn, and while they have only the protection afforded by a close season from sunset Friday evening until sunrise Monday morning, during the remaining days of the week they can be legally taken.

The close season should be for the entire months of May and June only, for these

are the spawing months, and ample provision made for enforcing this law.

While the cost of doing so would only be a few hundred dollars. The result would be the restoring the catch to an average and a source of income of from \$10,000 to \$12,000 yield to the fishermen of the counties of Hants, Colchester and Cumberland for it is on the Bay of Fundy coast that these fish are mostly taken.

## ALEWIVES OR GASPEREAU.

While the catch was five per cent over that of last year it is still forty-five per cent less than an average of the past 19 years.

 $22 - 6\frac{1}{2}$ 

8-9 EDWARD VII., A. 1909

It has been remarked that when the rivers have become depleted of anadromous fishes the fishermen have to go further from the coast to catch deep sea fish, because they are attracted to the coast by these bait fish and considering the value of the Gaspereau in this way as well for its inherent value, it seems important that the close season which is now from Friday evening at sunset to sunrise on Monday morning should be extended.

#### HERRING.

The yield this year is about thirty per cent less than last year and fishermen say it is due to the presence of dog-fish which not only drive them from the coast, but destroy herring nets to such an extent that it deters them from prosecuting this fishery.

#### MACKEREL.

The catch has been nearly fifty per cent less than last year. The returns show great fluctuations in the yield of these fish, some years the catch has been three times that of last year which was nearly the smallest of the past nineteen seasons.

#### HALIBUT.

The catch was larger than last year but is twenty per cent less than the average of the past nineteen years.

#### LOBSTERS.

There was a very slight increase in the quantity taken this year.

About 38,000 cases of 48 pounds each were canned in the district or about 1,000 cases less than last year, but 6,000 cwt. were exported fresh in shell more than last year.

On the Atlantic coast in the counties of Halifax and Guysboro the pack was short about 3,000 cases, but if the excess of those exported fresh in shell had been canned, the shortage would only be a few hundred cases.

On the Straits of Northumberland about 1,600 cases were canned more than last

year. None are exported fresh in shell from this portion of the district.

Here the season for fishing began several weeks later than usual it being about the 20th day of May before traps could be set, owing to the presence of fields of ice while the legal season closes on July 10, but during this short time fishermen were kept quite busy. Some of the factories getting more fish than they could attend to.

#### SQUID.

This fish which is used for bait for the deep sea fish seems to have kept away from the coast, for only 500 barrels were taken as compared with 11,000 barrels last season. Some years as many as 20,000 barrels have been taken.

#### CLAMS.

In some portions of the district clams are becoming scarce and small notably in the eastern part of Halifax county and the fishermen there are asking for a close season.

#### FISHWAYS.

One fishway was built in the district last year, viz.: on the Antigonish branch of St. Mary's river.

There are a number of dams in the district which should have fishways, in fact upon every stream frequented by salmon and gaspereau, all such dams or obstructions should

be provided with efficent fish passes.

Overseer Rowlings reports two dams on Ship Harbour river and several dams on the Laurencetown river in the county of Halifax. There is one on the Meander river in the county of Hants, one on Salmon river in the county of Colchester, and two on the River John, Pictou county, all of which should have fishways.

During the past year, the close season for lobsters has been well observed.

Considerable poaching of salmon was reported on Musquodoboit river, Halifax

ounty

There were twenty-one cases tried before the inspector and local fishery officers, the latter convicting on view, in all there were seventeen convictions.

I have the honour to be, sir,

Your obedient servant,

R. HOCKIN,

Inspector of Fisheries.

## DISTRICT No. 3.

ANNUAL REPORT OF THE FISHERIES OF DISTRICT No. 3 OF NOVA SCOTIA, COMPRISING THE COUNTIES OF LUNENBURG, QUEENS, SHELBURNE, YARMOUTH, DIGBY, ANNAPOLIS AND KINGS.

Barrington Passage, N.S., May 15, 1908.

To the Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to submit my annual report for the District No. 3, of Nova Scotia, with the tabulated statements of the yield and value of its different fisheries, for the season of 1907.

The total yield of all the fisheries production, compiled from the various returns of the different officers under me, is valued at over four million and a half of dollars, which exceeds last year's production by \$500,000.

The following statement gives the relative importance of the different counties of this division, showing also the fluctuations from last season:—

Counties.	1907	Increase.	Decrease.
	. \$	\$	\$
Digby	1,304,584	149,127	
Lunenburg	942,604		
Yarmouth	866,648	194,047	
Shelburne	769,747		348,737
Annapolis	308,915	192,137	
Queen's	210,722	10,653	
King's	127,476	10,000	28,638

#### REMARKS.

A glance at the above table points out the best showing to be in the counties of Yarmouth, Annapolis and Digby, which give a combined increase of over half a million dollars. In the above named three counties, to the large proportion of line fish or the cod family, can be ascribed this improvement.

In three localities only, in the vicinity of Tiverton and Freeport, Digby county, all fish captured and disposed of is valued at over \$600,000. While the fishermen of Digby town itself and vicinity also secured a quarter of a million dollars worth of fish and fish products. Gasoline launches are now superceding the old style of fishing boats, enabling fishermen to seek better fishing grounds and return home every evening in a very much shorter time and in a very much more comfortable manner than with the former means of transportation.

In the county of Yarmouth, in the vicinity of Port Maitland and Sanford, the good capture of fresh mackerel was again repeated during the season of 1907, and 135,000 pounds were reported captured in that vicinity.

While not quite so many lobsters were preserved as during the previous season, canners realized higher prices and interested parties received nearly as much for their investment. Nine thousand cwts. of these crustaceans were shipped fresh or alive in excess of the previous season from Yarmouth Port alone, mostly to Boston markets where they brought handsome returns, nearly double what they are estimated at for statistical purposes.

In Annapolis county, the handsome surplus over the previous quantities is made up of nearly a general yield of all kinds of fish, mostly line fish and especially in the

vicinity of Hillburn and Victoria Beach.

The large falling off noticed in Shelburne county may be ascribed to a more careful compilation of the statistical material by our fishery officers, but there seems a general decline in the principal kinds of fish, especially line fish, which alone is reduced by nearly a quarter of a million dollars. Cape Island, alone as a fishing center, has declined \$100,000 in the value of its fisheries.

Speaking generally for the whole district, the most noticeable fluctuation is the decline in the catch of mackerel of nearly \$150,000 in value, particularly in Queens county, which had yielded excessively the season previous (1906). Herring also shows a reduction of \$67,160, which is more pronounced in the counties of Lunenburg, Shelburne and Queens. Cod, haddock and hake alone show an aggregate value of over \$300,000 above that of the preceding year.

I have the honour to be, sir,

Your obedient servant.

A. C. ROBERTSON, Inspector of Fisheries,

# NOVA SCOTIA, DISTRICT No. 1.

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials in the County of Richmond, Province of Nova Scotia, for the year 1907.

					0-5 EDWAILD	¥ 111.9
		Number.	1 10040	∞ ~ ∞	20152455	
		Cod, dried, cwt.	100 310 2475 120 *2860	1412 668 952	480 35010 70011 500012 30013 17514 17515 50016	16577
	'llens r	Lobsters, fresh in ewt.	1 007	156 24 7		587
		Lobsters, preser cans, lb.	10846	26256, 6816	19432 32472 4032	19678 587
FISH.	l, brls.	Mackerel, saltec	700 575 155 400	635 255 111	68 900 5700 320 117 90 40	
Kinds of Fish	.dI ,	Mackerel, fresh		16700 6400 1000	16000 30000 22000 1000 1100	1 1
KIN	.dI	Herring, fresh,		8100 1350 4600	46000 18000 14000 2200 1700 2200 2000	7492 115150 105100
	brls.	Herring, salted,	900 540 100 250 1360	1260 326 180	205 130 500 1600 74 30 21 -16	7492
	ui bəy	Salmon, preserveans, lb.	: : : : : :		500 500	069
		Salmon, fresh, l	500	110	800	01410
	Trawls.	·9nlæ.	\$\\ \frac{50}{115} \frac{50}{500} \\ \frac{65}{100} \\ \frac{100}{1200}  \frac{1200}{1200} \tag{1.50}	680 135 100	300 100 275 440 1800 300 800 70 110	4160 4410
AR OR	Tra	Number.	10 23 13 240	175 27 17	08 10 10 10 10 10 10 10 10 10 10 10 10 10	724
Fishing Gear or Materials.	v.	$\Lambda$ alue.	\$ 4400 3320 1410 468 8930	8580 4100 1120	380 1300 4000 30000 2750 1150 600 1800	74308
Fishi MA	Gill-nets	Fathoms.	22000 18800 9000 3120 9320	17300 12000 2800	860 2600 8000 60000 5400 1200 3600	78200
		Number.	1100 940 450 156 926	860 660 140	43 1130 275 115 115 180	375
zô		Men.	66 91 44 44 152	180 91 40	43 43 70 130 130 400 660 3000 53 115 74 60 120 180	1963
BOATS	Boats.	.9nlaV	\$ 590 760 370 272 1296	1350 674 270	345 600 11000 11400 975 495 675 3000	24072 1963 9375 178200
S ANI		Number.	59 76 43 34 108	144 61 89	277 277 277 20 20 40 40	1073
SSEL		Men.	16 75 75 	200	24. 5.	280
FISHING VESSELS AND BOATS	Vessels.	Value.	\$2200 950 7350	1250 1150 2500	375 2500 650	24525
Fish	>	Tonnage.	112 54 300 312	90 20 84 84	25. 25	1136
		Number.	4 11 20	ಸ್ವಾಣ		52 1
	Districts.		Richmond County.  1 Canso to Port Richmond 2 River Inhabitants and vicinity 3 River Bourgeois, St. Peters and vicinity 5 Arichat and Petit de Grat 6 Cape Auguet to Port Royal, including		Barr Head and Red Islands  11 Rockfale 12 L'Ardoise, Lower and West. 13 Point Michand and Grand River 14 L'Archevêque and St. Esprit 15 Caplin Cove and Framboise 16 Fourchu,	Totals.
		Xumber.	128470 0AVAD	F ≈ €	15 E E E E E E E E E E E E E E E E E E E	

\* In the Arichat district, add 300,000 lbs. salted and fresh cod, \$9,000.

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Richmond, Province of Nova Scotia, for the Year 1907.

- 11-		Number.	
		TOTAL VALUE OF ALL FISH.	\$ cfs. 16.844 00 15.541 00 1.921 40 1.921 40 20.257 80 80.653 70 15.060 55 10.265 50 5.245 25 7.129 50 1.321 72 1.321 72 1.
		Claims, bris.	11 30 30 30 30 30 30 30 30 30 30 30 30 30
		Fish as bait, brls.	202 220 11120 1120 1120 1140 1140 1140 1
		Fish oil, galls.	150
		Coarse and mixed fish,	26 24 24 24 24 24 25 25 25 26 21 176 2 24 25 25 25 25 25 25 25 25 25 25 25 25 25
		Squid, brls.	150
		Tom cod or frost fish,	2300 25000 25000 60000 40000 27700
		Flounders, lb.	20000 4000 38600 38600 387750 7050 5000 5000 8600 6000 193550
		Eela, brla.	8 8 22 22 23 28 8 8 8 8 8 8 8 8 8 8 8 8
	SH.	Alewives or Gaspereau,	560000         8           900         22           900         22           800         170           800         3           1700         39           600         40           700         110           80         17           80         10           80         23           80         23           80         23           80         582           10         24           20         28           20         28           20         451           20         451
	Kinds of Fish	Smelts, lb.	1 10
	SUNI	Trout, lb.	14885 1885 1885 1885 1885 1885 1885 1885
TOOT TOOT ON	X	Halibut, lb.	4800 4800 7850 7850 1850 1000 3000 3062 3062
3		Pollock, cwt.	25 50 50 60 60 42 10 10 93 50 60 110 93 50 60 110 93 50 60 60 110 80 80 80 80 80 80 80 80 80 80 80 80 80
		Hake, sounds, lb.	124 124 125 126 127 128 128 128 128 128 128 128 128 128 128
		Hake, dried, cwt.	500 600 100 95 113 118 118 119 117 117 117 117 117 117 117 117 117
		Haddock, smoked, (finnan haddies), lb.	60 75 1900 275000 1660 134 108 108 100 100 100 100 100 100 100 100
		Haddock, dried, cwt.	
		Haddock, fresh, lb.	20 410000 118 160500 118 2900 12 2900 13 3800 2 2800 2 2800 2 2800 2 7000 14 617400 10 18522
		Cod, tongues and sounds, brls.	
		Districts.	Richmond County.  1 Canso to Port Richmond 2 River Enhabitants and vicinity. 3 River Bourgeois, St. Peters and vicinity. 5 Arichat and Petit de Grat. 6 Cape August to Port Royal, including. 7 Rocky Bay and vicinity. 7 Buscouse to Martinique. 9 Irish and Hay Coves, Lynch River and Barr Head and Red Islands. 11 Rockfuld. 12 L'Ardoise, Lower and West. 13 Point Michaud and Grand River. 13 Point Michaud and Grand River. 14 L'Ardoise, Lower and West. 15 Caulin Cove and Framboise. 16 Fourchu. 17 Archevéque and St. Esprit. 16 Fourchu. 17 Archevéque and Framboise. 18 Fourchu. 19 Caplin Cove and Framboise. 19 Caplin Cove and Framboise. 19 Fourchu.
		Number.	-284700 Fx2 OH 51 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

RETURN showing the Number, Tonnage and Value of Vessels and Boats, and the Quantity and Value of all Fishing in the County of Cape Breton, Province of Nova Scotia, for the Year 1907.

		Number.		-020	4100			13 11	12		
	salted,	Mackerel, s brls.		520 170 195	67		250	13		1303	19545
ť.	resh, lb.	Mackerel, f		12000	330 1900	1700	0006	1200		38530	4624
e Fish.	.dI ,das	Herring, fr			.100		41000	3500		49600	496
KINDS OF	'pəal'	Herring, sa brls.		800 160 180	958	300	5800	80	086	13330	09999
×	di,besib.	Salmon, smo		000	::	::	: : :	:	:	900	380
		Salmon, fre		2000	9810	1260		2000	:	21290 1900	3193
LOBSTER PLANT.	Value.	Canneries,	<b>9</b>	6000 2000 1200	4500	2000	4000	:	:	20700	
Log	,oN	Canneries,		命ㅋㅋ		107	: 62	:	:	1	:
	Value.	esaril basH	60	110 260 165		160		53	20	1450 12	
	.oV	eanil basH		180 510 345	365	424	295	107	132	2314	
IALS	vls.	Value.	€9	60 265 195	90	100	310	190	360	8904	:
ATER	Trawls.	Number.		15 60 42	45	25	550	40	84	1094	:
B M		Value.	<del>60</del>	10	: :	: :	120	*	:	130	:
AR C	Seines	Fathoms.		120	::	::	75	:	:	195	:
G.	202	Number.		<b>H</b> ::	::	: :	:- :	:	:	22	1:
FISHING GEAR OR MATERIALS.	ts.	Value,	€€	3030 1780 2210	44		4430 1035	470	1050	20895	
독	Gill-nets.	Fathoms.		7520 4450 5500			14100 3800	3400	3180	63870	
		Number.		383 178 220	537	8 22 8	190	103	162	2548	
TS.		Men.		110 89 42	172	30 40	241 02 03	50	128	993	1
FISHING VESSELS AND BOATS.	Boats.	Value.	<b>6</b> 9	3200 1760 1620	1095	360 420	1490 520	865	1190	15460	
S AN		Number.		272	69	8 8 8	30	28	98	498	<u> </u>
SEL		Men.		:4:	24	12	:22	650 12	:	16	1:
G. VES	Vessels.	Value.	60	400	2140	1200	13000 22 2000 14	650		19670	
ISHIN	Ves	Tonnage.		10	83	55	:06 :08	37	:	354	1:
<u>F</u>		Number.		· :	9.7		:00	- 67	and	20	1.
	Districts.		Cape Breton Co.	1 Gabarous Bay and vicinity . 2 Louisburg	4 Little Lorraine to MiraRiver, including Main-à-Dieu 5 Scatarie Island	6 Mira Bay. 7 Morien Bay and Schooner Pd.	8 Glace Bay and vicinity 9 Lingan to Sydney Harbour 0 North Sydney and vicinity.	11 Little Bras d'Or, Little and Big Ponds, etc	East Bay, both sides, an vicinity.	Totals	Values

SESSIONAL PAPER No. 22

RETURN showing the kirds and quantities of Fish and Fish Products in the County of Cape Breton, Province of Nova Scotia, for the year 1907.

	Number.		0100	4100	2001	11	12		
	Total Value of All Fish,	e cts.	47,834 80 23,698 40 14,807 00	43,522 85 6,432 00 2,865 60	22,355 00 33,895 00 55,900 00 7,978 40	15,948 00 11	92,088 00 12		367,325 05
	Seal skins, No.		: : :	70 : :	::::	:	:	10	9
	Fish as manure,		100			_ :	:	100	50
	Fish as bait, brls.		200	50 18 160	300 1200 2550	240	200	5108	7662
	Fish oil, gall.		900	980		520	190	4150	1245
	Coarse and mixed ash, brls.			: : :		:	90	6.	180
	Squid, brls.		10	12	15 78	10	:	125	200
	Tom cod or frost fish, lb.				::::	:	2100	5100	153
	Flounders, lb.		:::	: : :		:	8100	8100	243
	Oysters, brls.		- : : :		: : : :	:	45 8	45	270
	Eels, bris.		123		50.	20	185	246	2460
	Alewives or Gas- pereau, brls.		145	8 :	: : : :	:	65	258	1032 2
Fish.	Smelts, lb.		0006	300		1300	7300	17900	895 1
OF	Shad, bris.		35	97 :	: : : :	:	:	43	430
KINDS OF	Trout, lb.		200	240		:	4900	5340	534
K	Halibut, 1b.		2000	4420 6000 1500	3000 15000 34000	7000	4	72920 5	7292
	Pollock, cwt.		150 18 26	90		830	:	2624	7872
	Hake, dried, cwt.		20	121		:	:	. 65	195
	Haddock, dried, cwt.		130	1325	009 000	65	:	4066	14231
	Haddock, fresh, lb.		8500		8500	530	:	31330	940
	Cod, dried, cwt.		1800 1080 850	2825 800 120	400 3000 7400 9800	530	1254	29859	13155 149205
	Lobsters, fresh in shell, cwt.		1800 360 36	140	93	:	122	2631	13155
	Lobsters, preserved in cans, lb.		48816 23088 7680	40000	59040	:		212656	63797
	Districts.	Cape Breton Co.	1 Gabarous Bay and vicinity. 2 Louisburg 3 Big Lorraine and vicinity.	including Main-à-Dieu 5 Scatarie Island 6 Mira Bay. and Schoone	Pond 8 Glace Bay and vicinity. 9 Lingan to Sydney Harbour. 11 Little Breed for 1 Little	Big Ponds, etc.	vicinity	Totals	Values

RETURN showing the Number, Tonnage and Value of Vessels, Boats and Nets, &c., in the County of Victoria, Province of Nova Scotia, for the Year 1907.

75         1900         770         190         770         1890         180 <th>1128</th>	1128
1900         770         10         50         72         36         750         36         36         36         750         36 <t< td=""><td></td></t<>	
1900         770         10         50         72         36         38         390         1280         1280         21         38         350         10         50         48         45         2         2         11775         3700         5         2500         216         1510         643         643         2         2         2         180         30         2 <td< td=""><td></td></td<>	
1900         770         10         50         72         36         37         38         38         38         38         38         38         38         38         38         38         38         48	
1900         770         1900         770         72         <	
1900         770         10         50           3900         1200         35         350           3410         1286         2         1800         30         260           11775         3700         5         2500         20         16         1510           1800         600         2         2000         29         565         1510         9         565         1510         9         565         1510         9         565         1510         9         20         2000         20	
1900         770         10           3900         1200         35         3           3410         1280         2         180         36           11775         3700         5         2600         20         16         16           1800         600         2         2000         29         5         16         16         16         16         16         16         16         16         16         16         16         16         16         16         17	
1990 770	
1990 770 3900 1286 22 11775 3700 52 1800 600 2 1800 600 2 1900 510 3 2400 1100 2 2400 1100 3	
1990 770 3910 1206 3910 1206 3110 1285 3110 1300 600 1190 510 2400 1100 2400 1100 2400 1100 2400 1100 2400 1100 2400 1100 2400 1100 2400 1100 2400 1100 2400 1100 2400 1100 2400 1100 2400 1100 2400 1100 2400 1100 2400 1100 2400 24	
1900 3900 3410 11775 1800 1190 1190 2400 2400	
175 1105 1105 1105 1105 1105 1105 1105 1	
1 '	
35 7 4 5 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
674 960 3390 3040 440 320 250 435	Total :
36 44 48 190 190 190 190 190 190 190 190 190 190	120
	(K.
123 3660	)
Cove to Barachois  Cove to Bancky Head  and South Bays and vicinity.  Harbour and New Haven all and Sparling Brook  af and vicinity.  Lawrence.	Values
	d d. vicinity. saven. ok

SESSIONAL PAPER No. 22 කි

b, Province of Nova Scotia	
Victoria	
Sounty of	
Products in the	Vogr 1907
Fish ]	for the
Fish and	
Quantities of	
Kinds and	
owing the	
JRN sh	

	Number.			2647001-800	
	SH.	cts.	40	620000000000000000000000000000000000000	85
	TOTAL VALUE OF ALL FISH	₩	5,211	3,308 9,258 9,258 40,224 7,322 2,355 8,713 10,750	120,844
	Fish as bait, brls.		333	22 23 37 460 	862
	Fish oil, galls.		123	80 120 260 2520 1680 150 500 800 800	1870
	Coarse and mixed fish, bris.		:	32-12	64
	Squid, binpS			185 185 54 54 15 15 186	1544
	Tom cod or frost fish, Ib.		94 5500 4200	1500	126
	Flounders, lb.	Į	5500	5700 4200	171
	Oysters, brls.			9 103	618
	Eels, brls.		122	14 10 110	161 1460
	Smelts, lb.		1350 2000	600 1225	
H.	Trout, lb.		1350	600	195
Kinds of Fish	Halibut, lb.		:	800 6000 800 6000 2000 14250	1425
SINDS (	Pollock, cwt.		;	67 40 264 496 280 280 112 11330	3990
M	Hake, dried, cwt.		:	170	516
	Haddock, dried, cwt.		:	13 90 297 5020 740 10 60 300 410 6940	24230
	Cod, fresh, lb.		:	9400	282
	Cod, dried, cwt.		400	168 110 205 2770 2220 40 200 700 700	35115
	Lobsters, fresh in shell, cwt.		:	27	135
	Lobsters, pre- served in cans, lb.			24912 12624 229672 17040 15984 6432 106664	31999
	Mackerel, salted, bris,	10 T	:	13 43 43 43 40 12 6 6 8 8 43 43 43 43 43 43 43 43 43 43 43 43 43	5160
	Mackerel, fresh, lb.		:	11000	1449
	Districts.	Victoria County.	1 Little Narrows (both sides)		Values
	Number.		12		

Return showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., in the County of Inverness, Province of Nova Scotia, for the Year 1907.

			1			u	10	9	2	တ တ	EDW			•	
		Number.		-8	22	67 00 es 4.		<del>.</del>			96 10	12	13	90	22
		Lobsters, 1		27888	53472	10752	7876	:	46368	7008 49700	40896 9408	:		254756	76427
	salted,	Mackerel, s		150	258	175	43	105		10	16	2000		2853	42795
нi	'usəлı	Mackerel,		:	:		•	- ;	:	1000		4000	:	2000	009
KINDS OF FISH.		•dI		0029	1050	::	· :	:	5000	2000	3000	10500	400000	433250	4333
O SO	resh,	Herring,					:	-				$210^{'}_{ m l}$ $10^{'}_{ m l}$	235 400		1
KIN	salted,	Herring, a		222	200	300	180	230	266	300	400	21	23	4103	20515
	s, lb.	Salmon, pr		400	480				006	٠ ١	* * *	2000		6780	1017
	'qsə	Salmon, fr		15000	25500	12900	35250	20560	860		2600	3000		116650	17497
LOBSTER PLANT.	Canne- ries.	.eulaV	€€	2000	2050	150	200	200	1500	2000	300		:	11780	
P	Ca	Number		63	7C)	HH	0 1	1	0 1	0 1 0	00	30	08	8 18	1:
	Hand lines.	Value.	69	95	443	115	120	- 32	70	200	1000			3 1718	1:
ITALS	Hand	Number.		100	358	300	164	124	97	200	100	30	300	2043	1:
ATEB	w]s.	Value.	60	:	175	150 270	225	170	110	220 1200	300	120	155	3365	
)R M	Trawls	Number.		:	17	16	12	6	28	3000	75	30	52	683	
GEAR (		Value.	<b>€</b> ₽	1530	1850	1100	2350	1400	410	500	850	. 600	800	15990	
Fishing Gear or Materials.	Gill Nets	Esthoms.		2925	4600	1750 1950	3170	1630	1500	1500	2400	1800	3008	42925	
Œ	Ü	Number.	1	61	184	31	39	33	89	300	806	09	400	1438	
zr.		Men.		94	90	63	43	35	51	98	71	09	137	910	
VESSELS AND BOATS	Boats.	Value.	<b>69</b>	470	1630	1200	970	800	620	410	540	550	1440	12730	
S ANI		Number.		47	35	23	32	20	31	25	49	30	120	588	
SSEL		Men.		:	82	::	:	:			9	12	:	103	
	sels.	Value.	60	:	450	::	_ <u>:</u>	:			300	800		6550	
Fishing	Vess	Tonnage.			294 5450	:					15	32	:	341	
F		Number.				• •			:		- :	67		188	
	Dramproms		Inverness Co.	Meat Cove, Pollet's Cove		3 Margaree Harbour, 1s- land and River, also Lake Ainslie	5 Doucet's, Delaney's and Whale Coves	6 Chimney Corner, St. Rose	7 Mabou 1Ir., Port Ban	8 Little and S. W. Mabou and Seaside	10 Judique and Little Judi- que que pt to Low Point.	12 Pts. Hastings and Haw-	13 West Bay, Malagawatch	Totals	

SESSIONAL PAPER No. 22

RETURN showing the kinds and quantities of Fish and Fish Products in the County of Inverness, Province of Nova Scotia, for the Year 1907.

	Number.			67	ee 44	70	9	2	တ္	10	12	13		
	TOTAL VALUE OF ALL FISH.	ets.	15,630 90	124,227 60	23,415 60 15,155 90	23,760 30	18,027 00	16,648 40	4,899 90 27,905 00	15,624 30 6,540 90	37,922 50	14,799 00		344,557 30
	Clams, bris.		:	30	140	:	:	:	::	: :	*	:	170	340
	Fish as manure, brls,		:	155	22	270	260	:	::		:	:	1150	575
	Fish as bait, brls.		65	260	006	720	540	:	45	110	)&	630	4740	7110
	Fish oil, galls.		50	9200	400 500	250	300	65	200	::		250	11215	3364
	Coarseand mixed fish, bris.		55	115	150	300	315	:	: :		:	- <del>-</del>	1235	2470
	Squid, lb.		:	123	100	200	182	:	15	: 15	300	:	1075	4300
	Tom Cod or Frost fish, lb.			:			:			: :	*	2800	2800	84
	Oysters, brls.		:	:		:	:	:			:	550	550	3300
	Eela, bria.		:	225	30	:	:	:		17	35	52	361	3610
±	Alewives or gas- pereau, bris.		:	:	820	:	Ď	:	::	: ;	:	:	825	3300
KINDS OF FISH.	Smelts, lb.		:	1500	1300	:	200		1500	1100	15000	:	21300	1065
DS C	Trout, lb.		:	009	800	:	:	:	200	1200	:	:	4100	410
Kn	Halibut, lb.		:	550	600	006	009	:	::	: :	:	:	3150	315
	Pollock, cwt.		:	28	: :	:	:	:		: :	:	:	28	84
	Hake, sounds, lb.		:	:	: :	100	:		300	: :	:	:	400	100
	Hake, dried, cwt		:	100	350 150	320	380	40	1000	45	:	:	2490	7470
	Haddock smok'd fnn. haddies,lb.		:	:	::	:	:	i	200	: :	:	:	200	30
	Haddock, dried, cwt,		70	870	300	300	550	70	70	45	22	:	3080	10780
	Haddock, fresh,		:	:		:		2900	200	1600	:		12200	366
	Cod, tongues and sounds, bris.		:	ಣ	10 00	•	:	:	: 00		*		24	240
	Cod, dried, cwt.		213	17400	800 1500	1400	1300	170	124	75	30	940	24877	124385
	Lobsters, fresh in shell, cwt.		:	*	390	550		:	* *	::	200	:	1535	2292
	DISTRICTS.	Inverness Co.	Meat Cove, Pollet's Cove and Pleasant Bay.	z Cap rouge, Eastern Hr. and Cheticamp	land and River, also Lake Ainslie 4 Belle Côte	Whale Coves	and vicinity.	vicinity.	o Little and S. W. Mabou and Seaside 9 Port Hood 10 Judique and Little Judi.	11 Long Pt. to Low Point.	kesbury	and River Denys	Totals1	Values
	Number.		-	27 00	4 7	3 0	0	- 0	0 00	11 12	10	F		

## RECAPITULATION

OF the Yield and Value of the Fisheries in the Island of Cape Breton, for the Year 1907-08.

Kinds of Fish.	Quantity.	Rate.	Value.	Total.
		\$ ets.	\$ cts.	\$ ets.
Salmon, fresh	151,870 7,470 1,900	0 15 0 15 0 20	22,780 50 1,120 50 380 00	94 991 AA
Herring, salted	26,436 640,900	5 00 0 01	132,180 00 6,409 00	24,281 00
Mackerel, fresh Lb.  salted Brls.	160,705 14,566	0 12 15 00	19,284 60 218,490 00	138,589 00
Lobsters, preserved in cans. Lb.  "fresh or alive Cwt.	693,754 4,780	0 30 5 00	208,126 20 23,900 00	237,774 60
Cod, dried Lb.	78,336 309,400	5 00 0 03	391,680 00 9,282 00	232,026 20
" tongues and sounds	128 660,930	10 00	$\frac{1,280\ 00}{19,827\ 90}$	402,242 00
" dried Cwt. " finnan haddies Lb.	23,808 275,500	3 50 0 06	83,328 00 16,530 00	119,685 90
Hake, dried	3,724 779	3 00 0 25	11,172 00 194 75	,
Pollock, dried Cwt. Halibut Lb.	6,969 120,940	3 00 0 10 0 10		$\begin{array}{c} 11,366 \ 73 \\ 20,907 \ 00 \\ 12,094 \ 00 \\ 1,627 \ 50 \end{array}$
Trout	$   \begin{array}{r}     16,275 \\     43 \\     101,375   \end{array} $	10 00 0 05		430 00 5,068 78 6,660 00
Alewives or gaspereau Brls. Eels " Oysters "	1,665 1,204 698	$\begin{array}{c c} 4 & 00 \\ 10 & 00 \\ 6 & 00 \end{array}$		12,040 00 4,188 00
Clams " Flounders Lb. Tom-cod or frost fish "	$ \begin{array}{r} 1,591 \\ 207,350 \\ 39,800 \end{array} $	2 00 0 03 0 03		3,182 00 6,220 50 1,194 00
Squid Brls. Coarse and mixed fish.	2,274 2,533 31,016	4 00 2 00 0 30		9,096 00 5,066 00 9,304 80
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	11,767 1,250 5	1 50 0 50 1 25		17,650 50 625 00 6 29
Total for 1907				1,281,325 7 1,271,494 3
Increase			-	9,831 3

### RECAPITULATION.

STATEMENT showing the Number and Value of Fishing Crafts, Nets, &c., in the Island of Cape Breton, for the Year 1907-8.

Articles.	Value.	Total.
	\$ ets.	\$ ets.
107 fishing vessels (1,954 tons, 510 men)	54,405 63,026	44 # 40
14,547 gill-nets (315,290 fathoms). 3 seines (315 fathoms). 18 trap-nets 2,872 trawls 62 smelt-nets. 11,277 hand-lines.	122,131 330 14,300 19,366 481 8,530	117,43 165,13
50 lobster canneries (791 hands employed)	47,080 99,900	
173 freezers and ice-houses. 2,436 smoke and fish-houses. 344 fishing piers or wharfs. 59 tugs and smacks (fishing).	33,015 59,185 77,848 20,625	146,98 190,67
Total		620,22

# NOVA SCOTIA, DISTRICT No. 2.

Return showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the County of Cumberland, Province of Nova Scotia, for the Year 1907.

	di, ib.	Herring, smoke		40 32000 90 3700 190000				000	902 42300 2222900	4459
KINDS OF FISH.	.dI	Herring, fresh,		3700	: : :		500		45300	493
OS OF	, brls.	Herring, salted		90	: : :			135		1105 4050
Kini	n, fresh, lb.				1000	4400	3000	2000	7900	10011
STER ANT.	eries.	Value.	€€	23850 1275	: : .			: :	25125	
Lob	Cann	Number.		25.00		: :	: :	: :	31	
තු	FISHING VESSELS AND BOATS. FISHING GEAR OR MATERIALS. PLANT.  Vessels. Boats. Gill-nets. Seines. Trawls. Canneries.	Value.	€€	40		47	322	55.00	370	
ERIAI	Tre	Number.		∞ :	: : :		7 7	10	47	
MAT		Value.	66	30	40	: :	: :	: :	20	İ
OR	ines.	Fathoms.		09	40	: :	: :	: :	100	1
GEAR	vă	Number.		<del></del>	. c2	: :	: :	: :	60	Marketon men
ING	zó.	Value.	€6	655 1250	120			112	2980	
(E1)	Fathoms.		2990	180	3820	490	1010	16090 2980		
	Number.		144	:	105			635	-	
TS.	Boats.	Men.			1202				301	
Boa		Value.	6/9	1849	235 100 200	245	100	161	226 6084	
SSELS AND BOATS.	Number.		60	200	272	20	110	1		
		Men.		∞ :	: : :	: :	: :	<b>*</b> :	12	1 to the disease
G VE	sels.	Value.	€€	200	: : :	::	· ·	250	750	-
SHIN	Ves	Tonnage.		37	: : :	: ;	: :	10	47	
FI		Number.		. :	:::	::	: :		63	
	Premoving	Districts	Cumberland County.	Pugwash, Gulf Shore and Malagash.	3 Wallace. 4 River Philip. 5 La Planche.	6 Nappan and Maccan	S Advocate 9 Spencer's Island	10 Port Greville 11 Parrsboro' and Two Islands	Totals	

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish and Fish Products, in the County of Cumberland, Province of Nova Scotia, for the Year 1907.

	Humber.	cts.	50 1	00000000000000000000000000000000000000	10
	TOTAL VALUE OF ALL FISH.	**	131,185	26.625 1,518 2,068 2,068 194 4,984 8,415 1,195 1,195 1,195	180,789
	Fish as manure, brls.		420	700	617
	Fish as bait, brls.		1590	125	8695
	Coarse and mixed fish, brls.		:	1 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	36
	Tom cod or frost fish,		:	3000	06
	Flounders, lb.		:	8008	100
	Olama, bris.			15 10 10 10 10 10 10 10 10 10 10 10 10 10	74 80
	Oysters, bris.		. 238	: :::::: %	80 1674
	Bass, lb,		:	2000	8 0%
	brls.			156 100 75 20 80 80 431	1794
KINDS OF FISH.	Smelts, lb.		25300	20000 8400 16975 1200 800	4374 1
OF	Shad, brls.			20 20 275	9020
CINDS	Trout, lb.		:	200 200 160 250 240	199
M	Halibut, lb.		:	1200 2000 520 1150	107
	Pollock, cwt.		:	192 192 192	K76
	Hake, dried, cwt.		56	8 20 10 12 100	965
	Haddock, dried, cwt.		L-	112 40 40 15 17 17 17	400
	Haddock, fresh, lb.		:	450 300 160 350 500	1 62
	Cod, dried, cwt.			32 32 60 80 46 40 40 215	l to
	Lobsters, fresh in shell,		:	60  80 794 220 	0000
	Lobsters, preserved in cans, lb.		413520	49776	190000 0000
	Mackerel, fresh, lb.		550	400 400 100 300 200 1950	1.60
	Districts.	Cumberland County.		2 Port Philip, Northport and Amherst Shore 3 Wallace 5 La Planche 6 Nappan and Maccan 7 Minudie to Apple River 9 Spencer's Island 10 Port Greville 11 Parrsboro and Two Islands. Totals.	Y7=1
	Number.		1.1	0 04707-8000 F PAHAVANHH	

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., in the County of Colchester, Province of Nova Scotia, for the Year 1907.

ales aless timestations made	.41.	ed in cans		38976 1 2 2 3 3 	38976	11692
ISH.	-VI989	Lobsters, pr				1
OF F	oked,	Herring, sm		_ : : :00 : :	1000	20
KINDS OF FISH.	.dl ,ds	Herring, fre			1000	10
Kn	di di	Salmon, free		17500 1000 750 7080 7080 9320	35660 1000 1000	5349
NT.	Traps.	Value.	₩.	3370	3370	
PLA	Tr	Zumber.		4300	4300	:
LOBSTER PLANT.	Canneries.	Value.	Œ	1400 4300	1400	
Ä	Cam	Number.		67	67	
	nd es.	Value,	€€	107	10	1:
TALS	Hand Lines.	Number.		100	10	:
ATE	LS.	Value.	₩.	. 500 . 500 . 500	1100	
DR M	Weirs.	Number.			4	
FISHING GEAR OR MATERIALS.	Gill Nets.	Value.	<b>%</b>	2045	3295	
SHING		Eathoms.		81.00 950 27.00 3750	15500	
屋		Number:		265 3 9	288	
ATS.		Men.		245 10 10 18 22 22	320	:
FISHING BOATS,	Boats.	Value.	€€	1325 1325 150 105 500 375	3025	
Fish		Number		135	182	
	Districts,		Colehester County.	1 Steving 2 Stewingke. 2 Stewingke. 3 Five Islands. 4 Economy 5 Little Bass River to Highland Village. 6 Great Village to Queens Village.	Totals	Values
		Zumper.		1 Ster 2 Stev 3 Five 4 Eco 5 Litt	***************************************	

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Colchester, Province of Nova Scotia, for Number. H0100 4 10 10 TOTAL VALUE OF ALL FISH. 3,585 00 1,814 00 328 20 2,253 50 1,548 00 88 50 23,999 190 prls. 380 380 Fish as manure, 13 28 Fish as bait; bris. 0+1 149 44 Fish oil, galls. 9 500 300 1500 1000 Clams, bris. 250 250 Oysters, brls. 105 3000 105 3000 Bass, Ib. 420 pereau, brls. Alewives or Gas-KINDS OF FISH. 13600 1088 13600 Smelts, lb. 640 64 Shad, bris. 380 900 100 4 2500 3800 Trout, Ib. 4.2500 250 Halibut, lb. 12 the Year 1907. Pollock, cwt. 30 Hake, dried, cwt. 17 cwt. Haddock, dried, 175 2000 09 187 2000 Haddock, fresh, lb. 935 Cod, dried, cwt. ¥. 2 Stewiacke 3 Five Islands 4 Economy 5 Little Bass River to Highland Village 6 Creat Village to Queens Village Colchester County. DISTRICTS. Totals. Values Number.

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., in the County of Pictou, Province of Nova Scotia, for the year 1907.

		Mumber.		10040010		
FISH.	·dI	Herring, freeh,		13500 32800 25000 3500 3500 4700 2500	85500	855
	l, brls.	Herring, salted		130	250	1125
KINDS OF	.dl	Salmon, fresh,		860 7080 8000 7110 3800	49150	7372
LOBSTER PLANT.	eries.	Value.	6/€	13100 14850 300 600 1200 1000 300	31050	
Lob	Cann	Number.		4	23	
	Smelt Nets Canneries	Value.	<b>⊕</b>	510 270 120 400 600 700	2600	
RIALS	Smel	Number.		17. 98. 12. 12. 13.	09	
FISHING GEAR OR MATERIALS.	Trawls.	Value.	<b>6/9</b>	200	130	:
R OR	Tra	Number.			24	:
G GEA	rs.	Value.	<b>6</b>	840 450 1065 1065 750 650 685	4930	
FISHIN	Gill Nets.	Esthoms.		3600 550 320 2540 870 1760 1600	11940	:
		Number.		120 60 14 14 10 10 18 18 18	310	
TS.		Men.		174 100 100 27 6 6 113 110	347	
FISHING VESSELS AND BOATS.	Boats	Vslue.	€₽	3975 2900 120 370 125 150 175 150	7965	
LS AN		Number.		159 56 25 10 13	284	
ESSE		Men.		: : ea : : : : : : : : : : : : : : : : :	100	
NG V	Vessels.	Value.	₩.		006	
IRHI	Ves	Tonnage.		10	16	
		Number.				:
		DISTRICTS.	Picton County.	1 West Pictou 2 Pictou Island 3 Central Division 4 Southern Division 5 Mericomish Island 6 North Beach 7 Fonda	Totals	Values
		Number.	-	H0104700F0	)	

SESSIONAL PAPER No. 22

RETURN showing the kinds and quantities of Fish and Fish Products in the County of **Pictou**, Province of **Nova Scotia**, for the Year 1907.

	Number.		10040000		
	TOTAL VALUE OF ALL FISH.	e cts.	86,617 60 38,191 00 3,579 76 7,685 10 2,417 50 2,502 00 12,840 30 739 50		153,572 76
	Fish as manure, brls.		2600 1209 100 100 550	4250	2125
	Fish as bait, brls.		450 140 140 32 20 20 20 20 20 20 20	1487	2230
	Fish oil, galls.		2	0.2	21
	Coarse and mixed fish,		22	25	20
	Tom cod or frost fish,		25 3000	2 3000	06
	Clams, brls.			65 25	0 20
	Oysters, brls.		8 40 39 25 10	9 06	900 390
Hi.	bris, bris.			175	200 90
KINDS OF FISH.	Alewives or Gaspereau,			i .	5721 7
DS OF	Smelts, lb.			71522	!
KIN	Trout, lb.		2000 4000 4000 11000	1700	170
	Hake, dried, cwt.		20 30 10 10 10 10 10	80	200
	Haddock, fresh, lb.		1700	2800	84
	Cod, tongues and sounds, brls.		:: - : : : : : : : : : : : : : : : : :	-	10
	Cod, dried, cwt.		120 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	222	1110
	Lobsters, preserved in cans, lb.		265632 120720 11712 34848	432912	129873
	Mackerel, fresh, lb.		1800 300 500 300 400 400	4120	494
	Districts.	Pictou County.	1 West Pictou 2 Pictou Island 3 Central Division 4 Southern Division 5 Mergomish Island 6 North Beach 7 Ponds. 8 Lismore	Totals	Values
	Number.	1	120 4 70 6 F 20 5 F 30		

RETURN showing the Number, Tonnage and Value of Vessels, Boats, &c., in the County of Antigonish, Province of Nova Scotia, for the year 1907.

	Number.		_	67	භ <del>4</del>	70				
(pə:	Mackerel, salt bris.		16	4	10	4	129	1935		
] -dI ,di	Mackerel, fres		4850	1250	1000	3800	13400	1608		
'qĮ 't	Herring, fresh		14800	15200	7500 4500	7000	49000	490		
d, brls.	Herring, salte		252	52	95	90	533	2425		
,dI ,	Salmon, fresh		2000	42100	12000	8000	73100	10965		
anne-	Value.	₩	1000	1000	2200	1400	6300			
	Number.			7	12	7	9			
nelt fets.	Value.	€	75		99	100	419			
	Number.	_	916	7 29		0 2	150			
wls	Value.	<b>69</b>					87			
Tra	Number:		65	26	30	93	191			
ets.	Value.	€€	400	5100	1500	650	8150	:		
EZ	Number.		62	36	တက	4	44	:		
100	Value.	6/P	1388	441	640 350	350	3169	:		
II-Nets	Il-Net	Il-Net	Fathoms.		6360	1700	2300	1400	13240	1
G.	Number.		318	84	115	20	199	:		
6	Меп.		73	72	1-4	33	295	1		
cats.	Value.	<b>%</b>	1009	1093	300	345	3447	:		
	Number.		69	69	47	26	238	1:		
Laurence Communication of the	Men.		9				9	:		
sels.	Value.	<b>∌</b> €	350				350	1 :		
Ves	Tonnage.		28				88	:		
Dispricts.		Antigonish County.	Harbour Bouché, Linwood and Cape	Side Antigonish Harbour			Totals	Values		
	Vessels. Boats. (Gill-Nets. Trap. Trawls. Smelt Canne. 15. 15. 15. 15. 15. 15. 15. 15. 15. 15	Yalue,   Y	Xumber.   Ashee.   Ashee.	Mackerel, fresh, lb.   Mackerel, fresh, lb.   Mackerel, salted, bris.   Mackerel, salted, bris	Mackerel, rashed, brile.   Mackerel, rash, lb.   Mackerel, rash,	Vessels   Value   Va	Value	Vessels   Vess		

SESSIONAL PAPER No. 22

RETURN showing the kinds and quantities of Fish and Fish Products in the County of Antigonish, Province of Nova Scotia, for the Year 1907.

	Number.		<del></del>	67	ಣ	4	10		
	TOTAL VALUE OF ALL FISH.	ects.	20,248 00	15,907 00	24,635 10	8,746 90	13,783 90		83,320 90
	Fish as Manure, bris.		206	222	009	164	290	1782	891
	Fish as Bait, brls.		574	280	300	120	130	1404	2106
	Fish Oil, galls.		200	06	150	80	230	092	225
	Coarse or Mixed Fish, brls.		49	12	25	12	120	218	436
	Squid, brls.		15	4	- co	ಣ	:	22	100
	Flounders, lb.		4500	3100	200	1300	300	0026	291
	Oysters, brls.		:	.40	*	:	:	40	240
ISH.	Hels, brls.		-1-	30	25	:	:	62	620
KINDS OF FISH.	Gaspereau, bris. Bass, lb.		:	2		2	2 1200	8 1200	32 120
KIND	Alewives or Gaspereau, brls.		3500	000	2000	:			
	Smelts, lb.		 	35		:	:	0 14000	5 1120
	Trout, lb.		92		0 400	:	0 150	6 550	4 55
	Hake, sounds, lb.			4 100	5 340	7 200	0 860	6 1576	0 394
	Hake, dried, cwt.		2 20	4 24	75 175	30 297	1 460	2 976	2 2440
	Haddcck, dried, cwt.						0 41	0 152	9 532
	Haddock, fresh, lb.		200	009	1000	7500	2000	11300	339
	Cod, dried, ewt.		282	96	300	115		878	4390
	Lobsters, Preserved in cans, lb.		43200	21600	61392	16368	29328	171888	51566 4390
	Number. Districts.	Antigonish County.	1 Harbour Bouché, Linwood, Cape	2 Iracache, Bayneld, Monk's Head & South Side Antigonish Harbour	North Side Antigonish Harbour, Lakevale and South Side Cape George	4 North Side Cape George and Georgeville	5 Malignant Cove, Doctor Brook, Arisaig, Knoydart and Moydart	Totals	Values

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., in the County of Guysborough, Province of Nova Scotia, for the Year 1907.

				0-3 EDWARD VIII, A. 100
		Number.		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
NT.	bs.	Value.	€€	1500 1240 1240 720 840 660 960 1620 960 1630 360 2700 2700 5000 5000
в Рьа	Traps.	Number.		2500 2500 2500 2000 1200 1400 1600 500 3600 2700 1600 1600 1600 2700 1600 1600 1700 1700 1700 1700 1700 1
LOBSTER PLANT.	Can- neries.	Value,	₩	300 1100 800 800 800 11100 400 1100 1100
	ne C	Number.		
	nd es.	Value.	€€	20 20 20 20 30 30 30 30 30 30 30 30 30 30 30 30 30
	Hand Lines.	Number.		1000 140 40 40 40 150 150 150 100 120 120 120 120 120 120 120 120 12
	Smelt Nets.	Value.	ØÐ.	80 80 80 80 80 80 80 80 80 80 80 80 80 8
	SZZ -	Number.		:: \(\alpha\) : \(
	Weirs.	Value.	6/9	18 6 8 8
	<b>A</b>	Number.		:::: :::::::::::::::::::::::::::::::::
RIALS	wls.	Value.	6/9	150 1120 1120 1120 1120 1100 122 123 123 124 126 120 120 120 120 120 120 120 120 120 120
MATE	Trawls.	Number.		4.21.25.21. 2.01.01.01.02.4.01.88.1.00.00.00.00.00.00.00.00.00.00.00.00.0
FISHING GEAR OR MATERIALS.	Trap Nets.	Value.	<b>₩</b>	2000 2000 1350 1600
SE.	FZ	Number.		::::::::::::::::::::::::::::::::::::::
ING (	85	Value.	₩	250 725 250 150 250 150 250 10
Fish	Seines	Lathoms.		
		Number.		2 :0 : :0 : ::: : :0 = = 0 : : : : : :0
		$\Lambda$ alue.	66	400 400 850 850 850 850 850 850 850 8
	Gill Nets	Esthoms.		1400 2000 800 2000 1400 1900 2000 4400 11500 9800 2800 2800 2800 2800 2800 2800 28
	5	Number.		100 100 100 100 100 100 100 100
ø		Men.		25485 2 2 2 3 3 3 3 3 3 4 5 5 4 5 5 5 5 5 5 5 5 5 5
Vessels and Boats	Boats.	Value.	€	10000 22000 6000 375- 350 700 8000 8000 8000 8000 8000 8000 10000 7000 7
ANI		Number.		1002 32 32 32 33 35 35 36 36 36 36 36 36 36 36 36 36 36 36 36
SSELS		Men.		8
	Vessels.	Value.	<b>%</b>	1500 10000 1475 1700 1700 7000 1200
Fishing	<b>&gt;</b>	Tonnage,		62
至		Number.		
	DISTRICTS.		Guysborough County.	
		Number.	G	HANGA BYE THOUSONDINGS

RETURN showing the Number, Tonnage and Value of Vessels and Boats, &c., in the County of Guysborough, Province of Nova Scotia, for the Year 1907.

	Number.		888288	33	22 83 24 75	<u> </u>	38	
bs.	Value.	₩.	8500			2000	1950	63810
Tra	Number.		0006	:		2000	13600	88600
an- ries.	Value,	<b>%</b>	2300	:		250	1100	22850
) a   -	Number.		::: 27 ::	:	:::	: :=	67	25
nd ss.	Value.	60	46 60 60 80 140 140	90	00 76	240	40	4175
Har Line	Number.		46 60 60 80 70 140	6		245	40	625 4890 4175 25
elt ts.	Value,	69		40	160		72	625
Sm -	1		- : : : : : :		4 : :	: : :	6/3	32
		6/9		:	: : :	: : :	:	185
Vein			- <del>: : : : : :</del>	<u>:</u>	: : :	: : :	:	00
	.9nlaV	€9	450 1200 600 900 650 1150	800	250 400 650	300 430 430	120	26040
Tra	Number.		1559665	80	550	888	12	9627
ap ets.	Value,	40	1000 4200 4500 800 3000	2500	1200		:	30150 2627
FZ	l Mumber.		SIDHOUR	4	co : :	: : :	· :	500
Seines	Value.	60	400 600 180	:	500	800	:	2805 6380 58
	Fathonis.		120	:	100		_ :	2805
	Number.		: - :	:	T : :		:	0 27
	Value.	<b>₩</b>	2400 10000 5760 6590 4050					60990 27
ll Nets	Fathoms.		4800 20000 11520 13150 8100 13940					76500 1773 16646 355195
- E	Number.		240 1000 576 659 405 697	532			300	16646
	Men.		29 29 35 70 70				14	1773
Soats.	.9mlsV	89	680 2150 1380 2150 1350 1350	1920	1200 1420 2025	1980 1260 2870	560	1
H	Number.		19 26 30 80 80 80 80	44			14	1204
	.məlvi		12 12				70	278
sels.	Value.	600	1800		2000		1900	57450
Ves	Tonnage.		35.		26		34	60 926
	Number.		: 0 0		:::		-	13
DISTRICTS.		Guysborongh County.	26 Half Island Main 27 Half Island Cove 27 Phillips Harbour 28 Queensport 29 Fees Brook	31 Sandy Cove and Cooks	32 Guysboro and Man- chester 33 Port Shoreham. 34 St. Francis	35 Oyster Ponds 36 Sand Point 37 Steen Greek		otals
	Vessels, Boats. Gill Nets.	Mumber.  Value.  Value	Men.  Men.  Men.  Men.  Mumber.  Mumber	Complex   Comp	Vessels	Value	According to the colored by the co	Vessels   Care   Care

RETURN showing the Number, Tonnage and Value of Vessels and Boats, &c., in the County of Guysborough, Province of Nova Scotia, for the Year 1907.

									8-	.9 E	ED۱	W٨	RE	) \				909
		brls. Number.	1	20	<u>ಟ</u> -	1 :	:		110	225	3 10	1 15	$\frac{4}{17}$	18	119	22.	. 22	23 23
Cou.	'spun	Dried, cwt. Tongues and So		300	450	75	50.5	 	200	250	9 9	098	000	36				546
				97 :	307				170			72				-1-		
LOBSTERS.		Fresh in shell, o		:		:		:		- cn 	:				310	-		270
Los	dl ,an	Preserved in can		6192	31872			17616	24864	19296	19159	16320	5712	TOOOT	27888	3724	41228	23856 80976
EREL.		Salted, brls.		0.4	70	· · ·	28	982	100	080	200	10	200	575	128	425		648
MACKEREL.		Fresh, lb.		200	200		2000	200	200	200	2002	100	1000		:		23200	32000
		Smoked, lb.		:::				::	:				:		:	: :	:	870 5
HERRING.		Fresh, lb.		1000	1000	000	1000	1000	1000	1500	2000	009	000				100000	768000 9870 500400
. 4		Salted, brls.		100	1000	000	260	120	350 120	260	150	115	1000	914	900	755	496	711
	ed, lb.	Salted or smok		120	500	300	200	::	: :	:		:	: :	:	:	: :	:	088
SALMON.	.dl ,sm	Preserved in ca			100	100	:	::		:		:		- <u>·</u>	:		:	2352 2
200	The state of the s	Fresh, lb.		1300	600	10000 800	5000	250	1200	300	150	200	000	:			:	25380
	Tugs, Steamers and Smacks.	Value.	0/9			: :	:					:	150	100			200	16200 25380 2352 2880
ERIES.	Steam	Zumber,		: :			:		: :		• :	:	-	p				-6 :
N FISH	Piers and Wharfs.	Value.	\$€	200	150	) 20 :	50	300	001	300	150	[671	3700	15900	9400	12800	2600	56900
SED I	Pier W]	Number.		4.0	eo ₁	:		6190	:	40				51 c	16	255	92	30
RES U	ouses.	Value,	€9	27.5	950	300	300	300	100	1500	250	1000	1950	3400	3560	4900	2400	17800
OTHER FIXTURES USED IN FISHERIES	Smoke and Fish-Houses.	Number.		16	2000	12	15	120	9	27.00	00 t	0 0 0 0 0	7	9.0	88	40	12	63
Отнев	Freezers and 2e-Houses.	Value.	SO.	25	500	2007	200	1100		1000	:	1000		nner		5000	0000	75000
	Freeze and Ice-Hou	Number.		7 :	H :0	9 : 0	20.	.63		N F	:	: 67	: "	<del>-</del>			4 :	9
oster.	oyed in lob	Persons emplo		ळन	6 -	:	:	22		: :	:		12	24	• • •	10	26	11
	DISTRICTS.	Number.	Gunsborough County.	1 Ecum Secum. 2 Marie Joseph. 3 Liscomb and Spanish	Ship Bay.  4 Gegogin.  5 St. Marv's Bay and River.	6 Wine Harbour	8 Holland's Harbour and	9 Port Beckerton,	11 Country Harbour.	13 Drum Head	15 Coddles Harbour	16 New Harbour.	17 For Bay.	19 Charlos Cove	20 Cole Harbour	22 Whitehead	23 Raspberry and Dover	24 Canso and Canso Tittle.

SESSIONAL PAPER No. 22

REPURN showing the Number, Tonnage and Value of Vessels and Boats, &c., in the County of Guysborough, Province of Nova Scotia, for the Year 1907.

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Guysborough, Province of Nova Scotia, for the Year 1907.

8-9 EDWARD VII., A. 1909 Number. 6,446 10 3,667 50 88 8 38 TOTAL VALUE OF 1,390 13,834 13,834 10,762 10,762 11,649 17,450 17, 3,201 ALL FISH. 20,972 50 500 Clams, bris. 20 Seal Skins, number. 190 160 160 120 260 260 16 16 16 16 601 320 061 Fish as manure, brls. 991 200 Fish as bait, bris. 120 250 Fish Oil, galls. 01002,0003184 60 35 10 Coarse and Mixed fish, bris. Squid, bris. 000 300 1200 800 800 Tom cod or Frost fish, Ib. 800 500 500 0000 Flounders, lb. 99 07 4 20100 99 Rels, bris. SER - Engrapes: 3 Alewives or Gaspereau, bris. 475 300 100 400 500 2000 8500 0000 3500 Smelts, lb. Shad, bris. 300 3000 Trout, Ib. 4000 3500 2500 7480 000 2000 Halibut, lb. 100 1120 600 600 6334 6334 632 632 632 6334 30 30 Pollock, cwt. 'qI 'spunog HAKE. 652338 Dried, cwt. 3000 Smoked (finnan haddies), lb. HADDOCK. Dried, cwt. 1000 100 600 300 100 500 5000 000 300 Fresh, lb. 15 Coddles Harbour.
16 New Harbour.
17 Tor Bay.
18 Larry's River.
19 Charlos Cove.
20 Cole Harbour.
21 Port Felix.
22 Whitehead. Liscomb and Spanish and Wine Harbour Port Hillford and 8 Holland's Harbour Fisherman's Harbour Ship Bay..... Guysborough County. Ecum Secum.... and Indian River 12 Isaac's Harbour.... 11 Country Harbour. 4 Gegogin. 5 St. Mary's Bay 9 Port Beckerton... 14 Seal Harbour.... DISTRICTS. Marie Joseph Number.

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Guysborough, Province of Nova Scotia, for the Year 1907—Concluded.

	Number.	-2	90 23	30 24 00 25 00 25 50 27 70 28 90 30	20 31	50 33 50 33 50 34 50 35 70 37	20 38	30
	Toral Value of All Fish.	e cts.	20,055 90	328,368 2,431 24,106 6,087 51,213 3,934 8,180	5,557 20	4,578 4,014 5,014 6,975 5,056 5,056 10,110 7	19,603 20	777,130 05
	Clams, brls.		:	10	:		:	102
	Seal Skins, number.		- 🗄		:	: : : : : :	:	33
	Fish as manure, brls.		140	860 6000 80 30 300 120 90 90 200 286 134 70 286 74	30	16 10 10 16 20 20 40	12	9532
	Fish as bait, brls.		200	860 80 300 200 134 280	180	120 140 216 110 80 100	20	6925 9532 35
	Fish Oil, galls.		422	13330 200 1100 3180 3180 388 388	334	120 150 150 120 100	:	28849
.sla	Coarse and Mixed fish, b			189	:		:	2044
	Squid, brls.		:	218 20 20 15	9		:	294
.dl	Tom Cod or Frost Fish,				:		:	20800 12100
	Flounders, lb.		:	3100	:		:	20800
	Eels, brls.		25	30 10 10 20	35	02 04 52 · · ·	20	649
rls.	Alewives or Gaspereau, b		:	140 1 2 2  60 	9	g045L :	:	642
	Smelte, lb.		300	3200	1000	2850	:	45825
	Shad, bris.		:	∞ : : : : :	:	4	:	12
	Trout, lb.		:	2100 200 300 100 500 1200	009	1500 400 200 150 100	800	22250
	Halibut, lb.			74290	:		:	20079 136430
	Pollock, cwt.		450	13910 19 4 4 2185 8 8 8	28	20 20 118 128 20 20	20	20079
KE.	Sounds, lb.		:	5900 44 608 200 100 140	:	460	:	10268
HAKE	Dried, cwt.		10	1303 12 151 151 53 185 34 93	36	15 128 7 7	13	2996
	Smoked, finnan haddies, lb.		:	91830	:		35000	313 170830
Нарроск.	Dried, cwt.		09	1085 74 455 284 922 128 203	87	17 103 129 60 60 61 16	20	1
Hai	Fresh, lb.		10000	3103000 6000 70000 15000 75000 8000 12000	0009	18000 5000 1500 2000 11000	82000	3582400
	DISTRICTS.	Guysborough County.	23 Raspberry and Dover	24 Canso and Canso III.  15 Fox Island Main. 26 Half Island Cove. 27 Philips Barbour. 29 Vueen's Port. 29 Peas Brook. 30 Half Way Cove.	Cook's Cove	52 Chysboro and Man- chester. 33 Port Shoreham. 34 St. Francis. 36 Oyster Ponds. 35 Sand Point.	Mulgrave and Aulds Cove	Totals

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., in the County of Halifax, Province of Nova Scotia, for the Year 1907.

		Number.		88888888888888888888888888888888888888
LOBSTER PLANT.	Canneries,	Value.	<b>€</b>	2000 2000 2000 1000 11000
Lor Pr	Can	Number.		
	Trap-nets.	Value.	60	25500 4000 4000 21000 2220
	Trap	Number.		61 4 4
RIALS.		Value.	₩.	21 224
R MATE	Seines.	Esthoms.		7500 1800 1800 1200 7700 4180 7700 1100 1100 5200 5200 5200 5200 5400 60 60 60 60 60 60 60 60 60 60 60 60 6
AR OJ		Number.		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ING GE	FISHING GEAR OR MATERIALS.  Seines.	Value.	<b>€</b>	7200 8500 7000 7000 7000 22500 7400 1500 1500 1500 1500 1500 1500 1500 1
Fish	Gill-nets.	Fathoms.		28800 34000 280000 280000 100000 6000 12000 12000 12000 12000 12000 12000 12000 13200 13200 13200 13200 13200
		Number.		11440 1700 1700 1700 1700 1700 1700 1700
		Men		120 120 120 120 120 120 120 120 120 120
SOATS	Boats.	Value.	Ø₽.	2,100 6,000 4,000 4,000 4,075 1,500 1,500 1,200 2,300 1,200
AND E		Number.		260 260 260 260 260 260 260 260 260 260
SEELS		Men.		20 50 110 110 110 110 110 110 110 110 110
FISHING VESSELS AND BOATS	els.	Value.	<b>⊕</b>	2000 2000 2000 4000 2500 1200 500 2000 3750 3750 3750
Fish	Vessels.	Tonnage.		254 116 116 116 116 116 116 116
		Number.		04 · 75 H 20 75 4 H 4 4 . H H 75 H
	Dremprons		Halifax County.	1 North Shore 2 East St. Margarers. 3 Indian Harbour. 4 Peggy s Cove 5 Dover. 6 Dover. 7 Teremee Bay 8 Femant. 9 Sambro. 10 Ketch Harbour. 11 Fortiguese Cove. 12 Herring Cove. 13 Ferguson's Cove. 14 Bedford and Grand Lake. 15 Halfar. 16 Dartmouth, Bastern Passage and Devil's Island. 17 Cow Bay and Lawrencetown. 18 Seaforth and Threefathom Harbour. 19 West Chezetoook. 22 Masquodoboit Harbour. 23 Jeddore. 24 Chan Harbour and Owl's Head. 25 West Ship Harbour. 26 West Ship Harbour.
		Number.		

REFURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., in the County of Halifax, Province of Nova Scotia, for the Year 1907—Continued.

	z <sub>0</sub>	Number.		27 300 28 1300 29 1400 30 1500 31 3500 32 33 2100 34	10
LOBSTER PLANT.	nerie	Value.	66		16875
Log Pr	Can	Number.		:	20
	Trap-nets. Canneries	Value.	9/9		7820
	Trag	Number,			48
ERIALS.		Value.	<b>≎</b> ₽	360 40 40	46092 115920
FISHING GEAR OR MATERIALS.	Seines.	Esthoms.		300 102 102 102 102 102	46092
AR O		Number.		: : : : : : : : : : : : : : : : : : :	414
ING GE		Value,	ۮ	728 768 2140 760 244 116 4 260	125001
Fish	Gill-nets.	Fathoms.		3640 3840 10700 3800 1220 580 20 1300	567840 125001
		Number.		182 192 537 190 61 29 29 1	24881
public di disease di Mallio di Ma		Men.		25 10 10 10 10 10 10 10 10 10 10 10 10 10	2103
OATS.	Boats.	Value.	₩	2815 2815 524 225 470 80 418	59810
FISHING VESSELS AND BOATS.		Number.		25 25 25 25 25 25 25 25 25 25 25 25 25 2	2583
SSELS		Men.		1000	306
NG VE	els.	Value.	<b>€</b>	2150 200 1000 1000	38700
FISHI	Vessels.	Топпаке.	and an administrative	29 668 830 331	1234
		Number.		U400 · · · ·	26
	DISTRICTS.		Halifax County.	27 Pleasant Harbour and Tangier 28 Pope's Harbour and Gerrard's Island. 29 Spry Bay, Taylor Head and Mushaboon. 30 Sheet Harbour and Sober Island. 31 Beaver Harbour and Port Dufferin. 32 Quoddy and Harrigan Cove. 33 Moser River and Smith's Cove. 34 Mitchell's Bay and Ecum Secum.	Totals
	-	Number.		252 252 253 253 253 253 253 253 253 253	

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Halifax, Province of Nova Scotia, for the Year 1907.

	1	8-9 EDWARD VII., A. 19
	Number.	222
	Pollock, cwt.	105 20 20 20 20 20 20 20 20 20 20 20 20 20
	Hake, sounds, lb.	22 30 60 60 60 60 60 60 60 60 60 6
	Hake, dried, cwt.	1000 1000 1000 1000 1000 1000 1000 100
	Haddock, smoked fin- nan haddies, lb.	1500
	Haddock, dried, cwt.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
	Haddock, fresh, lb.	2000 20000 10900 12000 12000 12000 12000 13000 14000 14000 10000 1
	Cod, tongues and sounds, bris.	200 20 20 20 20 20 20 20 20 20 20 20 20
Fish.	Cod, dried, cwt.	300 1200 1400 500 500 300 800 1700 58 85 58 85 89 89 1477 89 89 89 89 89 89 89 89 89 89 89 89 89
KINDS OF F	Lobsters, fresh in shell, cwt,	0478888870 0508888870 05088888870 05088888870 0508888888 0508888888 0508888888888
Kind	Lobsters, preserved in cans, lb.	1680 12360 33024 7968 7968
	Mackerel, salted, brls.	04000000000000000000000000000000000000
	Mackerel, fresh, lb.	135000 103900 107100 91200 108000 108000 72000 72000 98000 1300 1300 600 450 450
	Herring, smoked, lb.	2000
	Herring, fresh, lb.	30000 20000 20000 10000 8000 8000 2000 1000 1
	Herring, salted, brls.	2000 2000 2000 315 315 300 300 500 500 500 500 500 500 500 50
	Salmon, smoked, lb.	3000 1000 1000 300 300 388 888 1150 450
	Salmon, fresh, lb.	500 2000 2000 2000 2500 2500 700 200 1000 1000 1350 860 300 1350 860 150 150 150 150 150 150 150 150 150 15
	Districts.	Halifux County.  1 North Shore 2 East St. Magarets 3 Indian Harbour 4 Peggys Cove 5 Dover 6 Prospect 7 Terance Bay 8 Pennant 10 Ketch Harbour 11 Portuguese Cove 12 Herring Cove 12 Herring Cove 13 Herring Lake 14 Bedford and Grand Lake 15 Halifax 16 Dartnouth, Eastern Passage and Devil's Island 17 Cow Bay and Lawrencetown. 18 Sagforth and Three Fathom Harbour 19 West Chezetoook. 20 East Chezetoook. 21 Repessive Harbour 22 Ansuquodoboit Harbour 23 Jacdore. 24 Glam Harbour and Owl's Head
	Number.	2822228282

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Halifax, Province of Nova Scotia, for the Year 1907—Continued.

	Pollock, cwt.	306 29 306 29 25 31 25 25 25 31 25 25 25 25 25 25 25 25 25 25 25 25 25
	Hake, sounds, lb.	9 9
	Hake, dried, cwt.	2656 6640
	Haddock, smoked fin- nan haddies, lb.	10000
	Haddock, dried, cwt,	21 28 48 78 78 67 67 67 10 10 10 1896 6636
	Haddock, fresh, lb.	296390
	Cod, tongues and sounds, brls.	190
FISH.	Cod, dried, cwt.	250 250 638 638 887 221 159 270 57 57 57 57 295 24782
S OF FI	Lobsters, fresh in shell,	63 603 1023 11297 11297
KINDS OF	Lobsters, preserved in cans, lb.	11760 35040 48768 54864 57696 • 322488
	Mackerel, salted, brls.	2 4 7 4 6 6 6 7 7 4 9 10 5 6 9
	Mackerel, fresh, lb.	11193960
	Herring, smoked, lb.	9000
	Herring, fresh, lb.	44 117 205 488 1915 325 325 191 191 191 10764 1301
	Herring, salted, brls.	
	Salmon, smoked, lb.	2420 25300 1060
	Salmon, fresh, lb.	36 (540 220 550 620 620 540 43069
	DISTRICTS.	Halifax County.  25 West Ship Harbour. 27 Elessant Harbour and Tangier. 28 Pope's Harbour and Gerrard's Island. 29 Shop Bay, Taylor Head and Musha-boum. 30 Sheet Harbour and Sober Island. 31 Easver Harbour and Poter Dufferin. 32 Quoddy and Harrigan Cove. 33 Moser River and Smith's Cove. 34 Mitchell Bay and Ecum Secum.  Totals.

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Halifax, Province of Nova Scotia, for the Year 1907—Continued.

11	Number.		1288470 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Total Value of All Fish.	Halibut, Ib.   Halibut, Ib.   Smelts, Ib.   Halibut, Ib.   Base, Ib.   Halibut, Ib.   Smelts, Ib.   Base, Ib.   Halibut, Ib.   Smelts, Ib.   Base, Ib.   Halibut, Ib.   Smelts, Ib.   Smelts, Ib.   Smelts, Ib.   Squid, bris.   Hish as bris.   His as bris.   Hish as bris.   Hish as bris	25, 433, 25 28,764 25 34,448 00 18,181 50 15,000 20 21,480 50 21,480 50 21,480 50 21,480 50 21,480 50 21,480 50 22,100 22,100 21,374 05 21,374 05 21,374 05 22,084 50 22,084 50 23,084 50 24,084 50 26,084 50 27,084 50 28,084 50 28,0
	Seal skins, Zo.		
A stransformer and	Fish as manure, brls.		200 200 200 100 140 140 140 140 140 140 140 140 1
N I TO THE PERSON OF THE PERSO	Fish as bait, brls.		200 2000 2000 2000 2000 2000 2000 2000
F 1	Fish oil, galls.		2500 10000 10000 2500
	Coarse and mixed fish, brls.		280 1200 280 280 280 280 280 280 280 280 280
	Squid, birls.		9461 8 8 8 8 4 4 4 4 4 7 6 8 . T
	Tom cod or frost fish,		2000 2000 2000 2000 2000 1120 1200 1300 13
FISH.	Flounders, lb.		2000 40000 10000 10000 10000 20
KINDS OF FISH.	Clams, bris.		200 188 190 100 100 100 100 100 100 100 100 100
	Oysters, brls.		: ia
	Eels, bris.		: 8 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
	Base, lb.		11000
KINDS OF FISH.	Alewives or gaspereau, bris,		88500850000000000000000000000000000000
	Smelts, lb.		9500 4600 10000 10000
	Trout, lb.		1150 1000
	Halibut, lb.		220 600 2000 300 800 800 11200 11140 1130 1240 1240 1240 1240 1240 1240 1240 124
	Number. Districts.	Halifax County.	1 North Shore. 2 East St. Magarets 3 Indian Harbour 4 Peggy's Cove. 5 Dover. 5 Dover. 6 Dover. 7 Therence Bay 8 Pemant 9 Sambro. 10 Ketch Harbour 11 Portuguese Cove. 12 Herring Cove. 13 Ferguson's Cove. 14 Bedford and Grand Lake. 15 Halliax. 16 Dartmouth, Eastern Passage and Devil's Island. 17 Cow Bay and Lawrencetown. 18 Seaforth and Three Fitthom Harbour. 19 West Cheretcook. 20 East Cheretcook. 21 Fetpeswick Harbour. 22 Musquodoboit Harbour. 23 Jeddore. 24 Clain Harbour and Owl's Head.

SESSIONAL PAPER No. 22

1,080 15 25 2,216 00 26 4,997 50 27 11,150 50 28 Number: RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Halifax, Province of Nova Scotia, VALUE OF ALL FISH. 27,065 4,951 20,975 26,019 1,329 22,633 4,997 TOTAL 26 101 Seal skins, No. 1848 Fish as manure, bris. 4168 50000 Fish as bait, brls. 870 160 190 120 120 200 200 510 2778 9260 Fish oil, galls. 3282 1641 Coarse and mixed fish, 183 732 Squid, bilps. 32800 984 Tom cod or frost fish, 7190 123400 3702 KINDS OF FISH. for the Year 1907—Concluded. Flounders, lb. 14380 Clams, brls. 30 Oysters, bris. 2650 265 Eels, brls. 100 000 Bass, Ib. 1616 brls, Alewives or gaspereau, 2348 2950 Smelt, lb. 1355 Trout, lb. 8990 520 1430 2090 4480 11140 440 1020 200 200 1580 Halibut, lb. 25 West Ship Harbour.
26 Bast Ship Harbour.
27 Pleasant Harbour and Tangier.
28 Pope's Harbour and Gerrard's Island.
29 Spry Bay, Taylor Head and Musha. F boom.

30 Sheet Harbour and Sober Island...
31 Beaver Harbour and Port Dufferin.
32 Quoddy and Harrigan Cove...
33 Moser River and Smith's Cove.
34 Mitchell Bay and Fcum Secum... Halifax County. DISTRICTS. | Number.

Return showing the Number of Vessels, Boats, Nets, &c., and the Quantity and Value of all Fish in the County of Hants, Province of Nova Scotia, for the Year 1907.

1		Number.		H 20 20 4 70		,
	Total Value of	ALL FISH.	\$ cts.	230 00 1,970 00 825 00 380 00 940 00		4,345 00
	1	Alewives or garantes.		110	260	1040
		Shad, brls.		100116	31	310 1040
FISH.		Trout, lb.		300 1000 2000 2000	4800	480
OF ]		Pollock, ewt.			120	15
KINDS OF FISH.	.47	Cod, dried, cv		12 47	59	202
×	slid ,b	Herring, salte		40	40	180
	.dI ,	Salmon, fresh		1200 10000 500 800 1000	13500	2025
SMOKE AND	FISH HOUSES.	.9ulsV	<b>€</b>	150	150	
SMOE	Fish	Number.			2	
M.S.	nd es.	Value.	€€		06	:
TERI/	Gill Nets. Weirs. Hand	Number.		120	120	:
t MA		Value	69		09	:
R OB		Number.			ಣ	
GEA		Value.	€€	90 700 675 280 360	2105	1:
HING		Fathoms.		2100 750 700 900	159 4750	1:
Fis	Gi	Number.		807.47		1:
E	, C L &/	Men.		45 50 7 10	116	:
Frentriko Doams		Value.	€€	120 490 400 300 600	1910	
7	Ter a	Number.		830.47	66	
	Diempros		Hants County.	1 Neel to Maitland. 2 Maitland to Shubenacadie 3 Shubenacadie to Grand Lake. 4 Hantsport to Windsor. 5 Windsor to Noel.	Totals	Values
		Number.		H0101470		

### RECAPITULATION

OF Yield and Value of the Fisheries in District No. 2, Nova Scotia, with comparative statements of the increase or decrease for the years 1906 and 1907.

	-			QUANTITIES.			
Kinds of Fish.	Quantity, 1907.	Rate.	Totals.	Increase.	Decrease.		
		\$ cts.	\$ cts.				
almon, freshlbs.	282,429	0 15	42,364 35		32,94		
preserved in cans lbs.	2,700	0 15	405 00	2,500			
smoked	11,100	20	2,220 00		7,52		
Terring, saltedbrls.	23,726	4 50	106,767 00		18,63 671,48		
fresh lbs.	1,489,920	0 01	14,899 20		1 ,		
smoked	242,770	0 02	4,865 40	166,770	1,192,75		
Iackerel, freshlbs.	1,898,330	0 12	$\begin{array}{c} 227,799 \ 60 \\ 93,720 \ 00 \end{array}$		6,45		
saltedbrls.	6,248	15 00 0 30	549,422 40		40,54		
obsters, preserved in cans lbs.	1,831.408	7 00	111.160 00		10,0		
fresh in shell cwt.	15,880 50,628	5 00	253,140 00	2 000			
od, dried cwt.	129	10 00	1,290 00				
tongues and sounds brls.  Haddock fresh lbs.	3,896,650	0 03	116,809 50		1,927,2		
It day out in the second secon	9,495	3 50	33,232 50				
dried	172,330	0 06	10,339 80		529,3		
Iake, driedcwt.	6,822	2 50	17,055 00		2,0		
sounds	13,634	0 25	3,408 50	4,294			
Pollock cwt.	25,301	3 00	75,003 00		12,5		
Ialibut lbs.	233,700	0 10	23,370 00		0.1		
routlbs.	47,980	0 10	4,798 00		6,1		
bhad brls.	402	10 00	4,020 00	20			
Smeltslbs.	228,972	0 08	18,317 76		,		
lewives or gaspereau brls.	2,025	4 00	8,100 00		3,8		
Bass lbs.	5,400	0 10	540 00		4		
Eels brls.	1,074	10 00	10,740 00 3,834 00		1		
ysters brls.	639	6 00 03	4,641 00		43,5		
Clounders lbs.	154,700	0 03	1,527 00				
Com cod lbs.	50,900	4 00	2,008 00		11,1		
equid brls.	3,946	2 00	7,892 00		3		
Coarse or mixed fish brls.	39,078	0 30	11,723 40		35,5		
Fish oil gals.	18,411	1.50	27,616 50				
Fish used as bait brls.	20,875	0 50	10,437 50	)	6,5		
isii piuducts as icitiiizot	116	1 25	145 00	10			
	= 0~=	2 00	15,714 00	807	7		
Clams brls.	1,001		, .	-			

# RECAPITULATION

Showing the number and Value of Fishing Vessels, Boats, &c., in District No. 2, Province of Nova Scotia, for the year 1907.

Material.	Value.	Total.
	s	\$
122 vessels (2,251 tons). 4,816 boats.	98,150 158,741	
43,580 gill nets (984,555 fathoms). 444 seines (48,997 fathoms). 150 trap nets. 4,654 trawls 27 weirs. 233 smelt bag nets. 12,975 hand lines.	202,470 122,370 46,120 36,694 1,460 6,018 8,411	256,89
107 lobster canneries	103,600 195,710	423,54
70 freezers and icehouses 1,818 smoke and fish houses 914 piers and wharfs 36 tugs and smacks.	141,265 214,501 204,854 39,530	299,310
· ·		600,150
		1,579,89

Comparative Statement of the Value of the Fisheries in each County of District No. 2, Province of Nova Scotia, for the years 1907 and 1908.

County.	Value in 1906.	Value in 1907.	Increase.	Decrease.
Antigonish Colchester Cumberland Auysborough Halifax. Hants	\$ cts. 71,595 24 28,584 10 120,944 00 1,161,141 75 668,166 50 7,353 50	597,148 10	59,845 10	\$ cts 4,584 6 384,011 7 71,018 4 3,008 5
Total  Decrease	142,302 50 2,200,087 59 1,820,305 41 379,782 18	$\frac{153,572\ 76}{1,820,305\ 46}$	11,270 26	462,623 2 82,841 0 379,782 1

NOVA SCOTIA—Continued.

DISTRICT No. 3.

# FISHERIES STATISTICS

COUNTIES OF LUNENBURG, QUEENS, SHELBURNE, YARMOUTH, DIGBY, ANNAPOLIS AND KINGS.

Return showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., Quantity and Value of Fish in the County of Lunenburg, Province of Nova Scotia, for the Year 1907.

		Number.		-107	° 60 4	50		00	6 -	0110	=	1.00	(8)			
	ni 'bəvı			25000	45000	:		58128	12480	:	140608	42182				
	d, brls.	Mackerel, salte		100	300	180	20	350	420	250	95	2375	35625			
Fish.	·dI ,	Mackerel, fresh		200	200	330	3000	250	2000	4500	300	17680	2122			
OF F	.dI	Herring, fresh,		200	200	900	1000	400	10500	13000	1600	30700	307			
KINDS OF	brls.	Herring, salted		300	100	1050	300	4000	2264	2388	975	12497	62485			
	di ,ti	Salmon, smoked		200	::	2000	200	:	:	:	:	750	150			
		Salmon, fresh, l		140	120	1000	4000	400	•	8240	9000	23100	4620			
T.	ries.	Value.	€€	: :	750	1000	:	:	009	200	:	2550				
Lobster Plant.	Canneries	Number.		::	: =	:03	:	<u>:</u>	ಣ		:	1				
	1	Value,	€9	2000	1600	880	1000	2000	12500	2000	200	27080				
	Gill Nets. Seines. Trap Nets.	Number.		111	oo 4	ㅋㅋ	10	19	20	00	67	139				
ERIALS		Value.	₩	8000	1500	1200	2400	2450	1200	1600	400	23550				
Fishing Gear or Materials.		Fathoms.		1800	1800	1800	006	4400	009	800	200	16000				
ZAR C		Number.		22	72	19	12	45	9	00	67	168				
ING G		Value.	<b>69</b>	1750	420 175	1160	3000	1500	14500	15000	10000	52505				
Fish		ill Net	ill Net	ill Net	Fathoms.		3000	3400	2300	12000	6200	29000	30000	20000	124900	
		Number.		30	22	17	200	30	450	200	1000	4523				
		Men.		140	95	215	250	460	170 1450	160 1500	144 1	2014				
Boats.	Boats.	Value.	€€	2500	1250	2250 2600	2500	8000	16500	15950	6030	11480 2014				
AND		Number.		120	75	195 130	200	400	200	420	150	2440				
SELS		Men.		. 70	::	. 10	370	:	840	610	ಣ	1833				
FISHING VESSELS AND BOATS.	Vessels.	Value.	€€	350		. 800	75000	:	56 4135 289450	45 3203 224210	1000	127 9207 590810				
ISHIN	Ves	Tonnage.		16	: :	40	23 1800	:	4135	3203	13	9207				
F		Number.		: ===	: :	:	23	:			p=4					
	Dismbrons		Lunenburg Co.	Fox Point	A Aspotogan	Blandford and Deep Cove	Martin River.	Tancook	to Kingsbury.	District	Fort Medway	Totals	Values &			

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Lunenburg, Province of Nova Scotia, for the Year 1907.

	Toral Value of All Fish.	& cts.	13,556 50 6,223 00	9,134 50 13,412 60	12,041 90 29,891 50	107,706 00	33,892 50	413,759 40 285,648 50	17,328 50		949,604 90
	Clama, bris.			: :	. 70	4	:	200	10	77	154
	Fish as manure, brls.	~~~	- <del></del>	: :	× .	:	170	: :	:	178	68
	Fish as bait, brls.		250	120	395	200	$160_{  }1200_{  }$		:	2795	4192
	Fish oil, galls.		80 40	45	46	400	160	33000	700	58503	17557
	Coarse and mixed fish, bris.		220	110	300	250	920	::	:	2185	4370
	Squid, bris.		: :	::		:	:	150	:	200	800
	Tom cod or frost fish, lb.		1500	2500	1000	3000	800	3000	:	22100	663
	Flounders, lb.		24000	21000	42000	0006	00029		:	236000	7080
ITE.	Eels, bris.		0101	4 :	: 4	4		15	12	78	780
RODI	Alewives or Gaspereau, bris.			10	40	10	:	* *	:	20	280
чвн Р	Smelta, lb.				2000	800		0008	12000	21300	1065
ND 1	Trout, lb.		100	::	50	200	:	::	:	800	
FISH AND FISH PRODUITS.	Halibut, lb.		200	800	500	15000	2200	11000	1700	36540	3654
OF	Pollock, cwt.		20	19	20	170	35	1200 375	90	1984	103 5952
KINDS OF	Hake, smoked, lb.		10	::	300	100	:	: :	:	410	103
K	Hake, dried, cwt.		500	88	24	10	38	2540	:	3209	9627
	Haddock, smoked, fin- nan haddies, lb.		: :	: :	200	200	:	:::	:	1000	9
	Haddook, dried, cwt.		200	10	45	20	350	5500	69	9999	23331
	Haddock, fresh, lb.		200	200	350	2600	750	2000	1500	21600	648
	Cod, tongues and sounds, brls.		70.01	: :	. 44	30	:	90	ؽ	136	1360
	Cod, dried, cwt.		400	12	97	20000	145	65336	1310	2160 138335	21600 691675
	Lobsters, fresh in shell, cwt.		500	10	103	10	25	800	90	2160	
	Districts.		1 Fox Point	Douge and Iv. W. Cove	ford and Deep Cove Cove Chester Bay	Martin River	cook Islands.	bour to K'gsbury 10 La Have Riv. Dist.	Port Medway	Totals	Values \$

RETURN showing the Number of Vessels, Boats, Nets, &c., and the Quantity and Value of all Fish in the County of Queens, Province of Nova Scotia, for the Year 1907.

				7.5	ಣ	473.9	2			
	, bris.	Mackerel, saltec		30	80	28 8 5	20	180	002	
		Mackerel, fresh,		2000	0000	3000		1	13800 2700	
SH.	'aı 'r	Herring, smoke		•	500 4000 3000 110000	· <u> </u>	<u>:</u>	2710 8000 3000 115000	60 1	
Kinds of Fish.			000	000		:	000	08		
0 801	Herring, salted, brls. Herring, fresh, lb.			400 4000	500 40	910	200	710 8	13550	
KIN					:		!	i .		
		Salmon, smoked		0 200	: 0			0 530	0 106	
	.d	Salmon, fresh, l		10800	2000	200	1000	24300	4860	
STER NT.	ner.	Value.	₩	. : :	1 1000	4 3000 1 300	3800	8100	:	
LOBSTER PLANT.	Canner ies.	Number.				:4-	2	000	:	
	Hand Lines	Value.	₩	180	.:	<u> </u>	:	180	:	
υζ	H.I.	Number.		360	:	: : :	:	360	:	
ERIAI	Gill Nets. Seines. Trap	Value.	<del>69</del>	2 1000	660 2000 10 3800	1 320 4 1500	900	7520	:	
MATI		Number.		600 2	00 10		· ·	00 20	:   :	
OR		Vaine.	<b>€</b>	240 6	30 20	100 100 80 100	:	80 28	:   :	
EAR		Number.		4 :	9 9	-: <sup>A</sup>	:	2 108	:	
NG G		Value.	€9		950	375 700 500		360 1	:	
FUSHING GEAR OR MATERIALS.		ll Nets	Esthoms.		8420 3400 930 185	3300	1200 2700 1800	4500 1250	22850 7360 12 1080 2800 20	
		Number.		420	190	75 140 100	250	680 1235		
		Men.		255	100	50 80 45	09	089	:	
Fishing Vessels and Boats.	Boats.	Value.	₩	3160	2500	840 1500 1400	120	10240		
g Vesse Boats.		Number.		140	80	33 60 75	20	533		
NG BO		Men.			70	15	:	20	1:	
SHI	Vessels.	Value,	9€		1 16 1200	906	:	2100	1 1	
되	Z e	Number.   Tonnage.		::	116	. 83	-:-	4 49	:	
	Dromoromo	DISTRICTS	Queen's County.	Port Medway 2 Mill Village and Greenfeld.	Head.	Hour Island, Summerville and White and Hunt's Points.  Fort Mouton and vicinity.  Port Mouton and Hebert.	ing to Kempt	Totals	Values	
		Number,		1 Port 2 Mill	H	5 Port	/ Dea			

SESSIONAL PAPER No. 22

Return showing the Number of Vessels, Boats, Nets, &c., and the Quantity and Value of all Fish in the County of Queens, Province of Nova Scotia, for the Year 1907—Concluded.

	Number,		127		470.0	-1	-	1
	TOTAL VALUE OF ALL FISH,		15,176 25 5,086 00	59,480 00	37,700 00 35,931 00 7,877 00	49,472 00		210,722 25
	Clams, brls.		- <del>24</del> : : :	-:	25	:	5 25	350
	Seal skins, No.		:	:		:	45	56
	Fish as bait, brls.		300	200	75 600 200	300	1675	2512
	Fish oil, galls.		400	100	75 120 80	06	865	259
	Coarse and mixed fish,		::	10	100	25	08	160
	Squid, binps		::	50	2502	10	155	620
	Flounders, 1b.		::	2000	1500 3000 1000	1000	8500	255
	Fels, bris.		40	:	12:	7	78	780
	Alewives or gaspereau,		10	:	20	:	565	2260
ISH.	Smelts, lb.		8000		1000	1500	10500	525
KINDS OF FISH.	Trout, lb.		6800	1000	1200	11000	21500	2150
Kind	Halibut, lb.		1000	4800	3000	120	11000	1100
	Pollock, cwt.		150	2130	90	100	2920	3760
	Haddock, smoked finnan haddies, lb.		::	2000		:	5000 2920	300
	Haddock, dried, cwt.		200	3600 5000 2130	330	200	4940	17290 300 8760
	Haddock, fresh, lb.		1000	2000	1000		4000	120
	Tongues and sounds, brls,		::	4	004	:	17	170
	Cod, dried, cwt.		1500	2500	5300 800 500	200	11300	46850 56500 170 120
	Lobsters, fresh in shell, cwt.	alar andreasan reserv		006	260 800 125	2600	4685	
	Lobsters, preserved in cans, lb.				72000	43200	116160	34848
	Districts.	Queen's County.	1 Port Medway.	Head. Summerville and	White and Hunt's Points.  5 Port Mouton and vicinity.  6 Ports Joli and Hebert.  6 Porth Mouton and Hebert.	ing to Kempt.	Totals.	Values

Value of Vessels, Boats, Nets, &c., in the County of Shelburne, Province of Nova Scotia, for the Year 1907. RETURN showing the Number, Tonnage and

		Number.		-0100	4	<b>10</b>	9	2	တတ	12	13		
	d, brls.	Mackerel, salte		750		10	10	:		:		793	11895
÷	di ,	Mackerel, fresh		2000	200	400	300	100	11550	2000	20700	76350	9162
Fisi	'qı 'p	Herring, smoke		500 1500 1500	1200	200	2000	1000	: :	:		8200	164
KINDS OF FISH.	lb,	Herring, fresh,		5000 2500 4000	3000 1200	2800	1000 2000	1000 1000	192800 186950	10560	26000 35100	860710	2098
Kn	brls.	Herring, salted		3500 1600 1650	1400	1175	975	160		:		10460	52300
	,dl	Salmon, fresh,		1000 2200 1300	40	40	:	4700	2300	475		12055	2411
TER.	ries.	Value.	€	5000	:	:	:	* * * * * * * * * * * * * * * * * * * *	500	0006	1500 2750	12950	
LOBSTER PLANT.	Canneries	Number.		:	:	:		:	67	•	<del>- 0 0 +</del>	16	:
		Value.	€€	1000 300 900	$150^{-}$	250	275	175	72c 736	476	2000 2004 828	9682	
RIALS	Hand Lines.	Number.		3000	150	250	275	175	368	238	282	3409	
<b>TATE</b>	vls.	Value,	€/⊋	200 1000 1 40 200 75 375	150	300	200	00 10	: :	:		2310 6409	:
OR J	Trawls.	Number.		200 40 75	30	09	40	17	: :		: : :	462	:
FISHING GEAR OR MATERIALS.		Value	<b>%</b>	2500 1500 2500	750	1250	2500	750	12000	2700	6240 3600	90290	
ISHING	Gill Nets	Fathoms.		15000 9000 15000	4500	7500	15000	4500	60000	13500	31200 18000	263200	
Ē	Gi	Number.		300 300 500	150	250	200	150	2000	450	1040	15440	
		Men.		225 70 60	20	09	20	14	290	99	170	1915	
Boats.	Boats.	Value.	€€	2000 1200 1100	850	1800	1000	250	3200 8700	2000	2800	62900	:
AND		Number.		*155 46 40	41	35	30	*10	160	99	130	1563	:
SELS		Men.		106	:	20	ಣ	12			902 41 37	740	1
FISHING VESSELS AND BOATS.	Vessels.	Value,	<del>\$9</del>	24000 300 24000	:	1200	200	1400	1600		3200	99675	
ISHIN	Ves	Tonnage.		428 10 391	:	33	Ħ	33		*	108	2701	1 :
ři.		Number.		12	:	23	-	60		120	10	147	1:
	Dismprons	Kumber.	Shelburne County.	1 Lockeport. 2 Jordan. 3 Shelburne and Sandy Pt	and Birchtown	and Carleton	Round Bay	Harbour. Sand Port	Clyde	10 Barrington.	12 Shag Harbour and Bear Pt 13 Wood's Harbour.	Totals	Values

\*Nore.—In lines 1 to 7 add 239 fishing dories valued \$28.90.

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Shelburne, Province of Nova Scotia, for the Year 1907.

	Number.		-0700	4	20	9	7	8 6 0	122		
	TOTAL VALUE OF ALL FISH.	& cts.	119,553 40 15,015 00 47,323 00	8,640 00	15,319 00	13,632 50	6,277 50		251,273 00 70,164 40 90,176 40		769,747 60
	Clams, bris.		150 5 350	70	10	20	67		88 : :	622	1244
	Seal skins, number.		: : :	:	:	4	:		: : :	4	100
	Fish as manure, bris.		: : :	:	:	:	:		00 00 00 00 00 00 00 00 00 00 00 00 00	370	185
	Fish as bait, brls.		600 125 200	75	100	100	20	1950 2200 2500	11000 1200 7500	27570	41355
	Fish oil, galls.		4500 200 5500	70	200	225	75	700 350 150	200	14970	4491
	Coarse and mixed fish, brls.		222	:	12	15	:	: : :	: : :	73	146
	Tom-cod or frost fish,		1200 1100 1100	200	200	400	300		: : :	2000	150
	Flounders, lb.		1000 1200 1000 1200 1500 1100	00019	10 1100	7 1000	200	:::		7100	213
	Heis, brls.		101	6.1	101	7	2	:::	: : :	52	520
	Alewives or gaspereau.		155	30	25	50	08	175 350	- 20	222	3100
JISH.	Smelts, lb.		3500 200	100	300	200	200	: : :		2000	250 3
OF E	Trout, lb.		600 800 4000	300	300	250	200	325	225	7300	730
KINDS OF FISH	Halibut, lb.		13500 1650 7504	150	1200	450	950	5970	41300 1350 1400	02989	2989
	Pollock, cwt.		2300 50 675	65	200	35	20	206 1365 284	2300	7605	22815
	Hake, dried, cwt.		300	-	20	:	:		: : :	326	878
	Haddock, dried, cwt.		1400 225 352	45	390	160	09		: : :	2632	9212
	Haddock, fresh, lb.		2500 6000	1000	009	400	1000	$\frac{331000}{210640}$ $\frac{47800}{4}$	51700 28930 34600	721170	21635 9212
	Cod, tongues and sounds, brls.		100	:	П	Н	7			28	280
	Cod, dried, cwt.		8000 540 5820	150	435	410	470	2060 5920 3360	22320 2610 1290	53385	266925
	Lobsters, fresh in shell, cwt.		1800 150 260	:	435	510	121	346 805 640	720 820	11047	110470
-	Lobsters, preserved in cans, lb.		50448	:	:	:	:	51122	198800 146800 198288	645458	193637
	Districts.	Shelburne County.	1 Lockeport and vicinity 2 Jordan district 3 Shelburne and Sandy Point, 4 Gunning Cove. Churchover	and Birchtown.  5 Roseway. McNutt's Island	and Carleton Black Point, Red Head and	Round Bay. 7 Port Saxon, N.W. and N.E.	Rarbours.	Clyde 9 Port Latour and Baccaro.	11 Cape Island	Totals	Values
11	Number.		. 10400 0	-							

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., and the Quantity of Fish in the County of Yarmouth, Province of Nova Scotia, for the Year 1907.

		Zumber.		100400780011	
	ni desi	Lobsters, fr		*31200	312000
	eserved o.	Lobsters, pr		48000 56400 38020 38020 190700 158640 158640 158640	16200 206898 312000
KINDS OF FISH.	·dl ·dsə	Mackerel, fr		15000 15000 15000 15200	16200
(DS O)	покед,	Herring, sn		300 800 800 1800	65
Kn		Herring, fre		54620         300         55000         48000           291000         350         65000         48000           115650         15000         197900           121800         38020         67400           1500         1800         197700           82500         158400         158640           1798240         135000         689660	17982
	sh, lb.	Salmon, fre		4500 3000 15000 34000 34000	0089
LOBSTER PLANT.	Canneries.	Value,	<b>4</b>	800 4700 800 1200 9200 2700 19400	
Lou	Can	Number.			:
rô.	Hand Lines.	Value.	₩	450 380 880 880 1110 380 380 380 380	:
RIALE	EE	Number.		18 270 900 200 3000 300 775 20 300 775 8 120 90 10 150 725 270 4050 4285	:
[ATE	Trawls.	Value.	€	270 210 3000 3000  120 150 4050	:
OR M	Tra	Number.			:
GEAR	to the contract of the contrac	Value,	6/9	1600 3000 5350 400 2250 4700 21000 1500 3006 4750 48550	.,,
Fishing Gear or Materials.	Gill Nets.	Fathoms.		3200 6000 10700 800 4500 9400 12000 2000 3000 6000 9500	:
Ħ		Number.		160 300 535 40 40 225 470 150 300 475 4855	:
zô	1	Men.		96 100 140 24 130 250 250 100 120 140 140	:
Fishing Vessels and Boats.	Boats.	Value.	<b>%</b>	720 96 160 1050 140 330 1050 140 330 180 24 40 970 130 225 2250 250 470 1750 250 210 1750 100 100 100 120 150 2400 2400 320 475 2400 320 475 12770 1670 4855	
s ANI		Number.		250 100 100 100 100 100 100 100 100 100 1	:
SSEL		Men.		288 288 30 170 1118 5 7 7 263 683	:
ING VE	Vessels.	Value.	<b>%</b>	3000 2970 1620 1135 1135 12520 350 465 50270 88080	;
Fish	>	Tonnage.		105 90 90 80 80 313 11 15 800 1975	:
		Number,		21 25 25 25 25 25 25 25 25 25 25 25 25 25	:
	Districts.		Yarmouth County.	1 Port Maitland 2 Sandford 3 Yarmouth. 4 Arcadia. 5 Pinkney Pt. and Coneau Hill 6 Tusket Wedge. 7 Tusket Wester 8 Salmon River 9 Eel Brook. 10 Argyle. 11 Pubnico. Totals	Values
		Number.		1928403028001	

\* Perhaps about 40 per cent of these live lobsters come from Shelburne and Digby Counties.

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Yarmouth, Province of Nova Scotia, for the Year 1907.

	Mumber.	· i	8	2000 000 000 000 000 000 000 000 000 00	:	55
	TOTAL VALUEOF ALL FISH.	e cts.	2 00	28,508 144,122 144,122 28,843 30,309 20,301 4,610 4,895 61,629 61,629		525 1440 866,648
	Clams, brls.		ì	020000000000000000000000000000000000000	720	1440
	Fish as manure, brls.	b	1	0.000	1050	
	Fish as bait, brls.			17.50 17.50	1970	3693 2955
	Fish oil, galls.	,		800 8300 1170 1600 3800	12310	
	Coarse and mixed fish, bris.		3	10 1200 16 225 16 225 14 475 50 475 70	170 3234	680 6468
	Squid, brls.		1		170	1
	Tom cod or frost.			1500 12000 12000 4000 2000 6000	31500	945
	Flounders, lb.	]			330 3000	06
	Eels, brls.			10228882 : : :		3300
ISH.	Alewives or gasperate, bris.			2900 5000 100 200	4025	16100 3300
KINDS OF FISH.	Smelte, lb.			1500 20000 20000 7000 1600 1800 1300 15000	00269	3485
KIND	Shad, brls.				18	006
	Trout, 1b.		_	1100 1100 18500 1800 1800 1800 1800 1800	59100	5910
	Halibut, lb.			1060 500 89500 1870 400 2370 	00996	0996
	Pollock, cwt.			2580 200 2060 730 110 680 	11616	3360 34848
	Hake, fresh, lb.			2000	44000 112000 11616 96600	
	Haddock, smoked, (finnan haddies), lb.			25000		2640
	Had dock, fresh, lb.			436000 125250 527875 63500 25000 188870  4120	160 1665805	49974
	Cod, tongues and sounds, brls.			28.08.00.00.00.00.00.00.00.00.00.00.00.00		1600
	Cod, fresh, cwt.			3500 2450 9630 1830 745 4340 	*52710	158139-1600
	Districts.	The state of the s	Yarmouth County.	1 Port Maitland 2 Sandford 3 Yamrouth 3 Yamrouth 5 Farmouth 6 Prinkney Pt. and Comeau Hill 6 Trinket. 7 Salmon River 9 Eel Brook 10 Argyle.	Totals.	Values\$

8-9 EDWARD VII., A. 1909

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., and the Quantity of Fish in the County of Digby, Province of Nova Scotia, for Year 1907.

	*TACHTINAT	1											
	Number.	1	40	ಬ 4	70.00	800	H	12	133	15	16		
cwt.	Cod, dried,		9830	8610 1455	1386 820 4280	1410 1367 5000	255	375 12	380 13	640 14 630 15	1020 16	62458	312290
ni dsə	Lobsters, fr		800	1175	1350 765 400	705 600 550	09	200	:	: :	:	7845	78450
bevred .	Lobsters, pre in cans, lb			1892	2976	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	:		:	41950	35952	153298	45989
esh, lb.	Mackerel, fr			: :	909	3850	200	:	14200	: :	4200	23850	2862
oked,	Herring, sm				35000 33600 217250	14000	2000		:	* · · · · · · · · · · · · · · · · · · ·	:	304850	2609
·dl ,da	неттіпg, fr		125000 115000	120800	112400 70000 65000	385000 8000 126800	471000	23400	:		:	1720700	17207
ted,	Herring, sal		3.66	007	250 60 310	10	515	20	260	255	120	2385	11925
unner-	Value,	€	300	1800	1000 3400 4700	1000	:	:	2500	800	400	16300	
0	Number.		:-	c2 :	710071	: :	:	:	6.7	-01		15	
awls.	Value.	<b>6</b> €							720		:		:
F	Number.		185 230	190	105 00 8	61 54 600	14	49	120	: :	:	764	:
rs.	Value.	<b>6</b> 9	2500	550	345 1700 50	150 250 775	270	:	:	: :	:	6790	
Sein	Fathoms.			250	200	135 100 450	270			: :	:	3665	:
	Number.		118	ea :	804	400	L-	:	:	::	:	43	:
σž	Value,	€	1500	700	350 300 300	260 300	85	180	510	$\frac{108}{240}$	480	6338	:
ill Net	Fathonia.		2400	2820	1400 1200 1200	1000 1060 1200	340	720	2300	540	2400	26440	:
5	Number.		300	140	588	53	17	36	85	18	80	1222	:
	Men.		295	145	75 444 660	50.00	37	45	96	138	36	1378	:
Boats.	Value.	99	4000 3500	7150	1700 1230 3500	1240 1075 3500	450	1225	3540	2650 1680	3600	41140	:
	Number.		145	169	54 46 38	43 32 150	24	35	80	90	18	134	:
	Меп.	-	70	35	16	147	:	4	L~	20.50	38	452 1	:
essels.	Value.		5500	2000	2700	40000	:	009	006	300	3000	70700	- :-
>	Tonnage.		355	126	42	275	:	17	24	14 28	127	1493	:
	Number.		77	4 :	ಣ : :	: :0	:	-	-		L-	02	:
Districts.		Digby County.	Vestport	Grove idville & East Ferry	Whale Cove andy & Mink Coves entreville	Waterford	Brighton to Wey	mouth	vicinity	vicinity Fetegran and River.	County line.	Totals	Values\$
	Vessels.  Cill Nets.  Canner C	Number.   Yalue.   Yalue.	Men.  Mumber.  Mumber.  Mumber.  Mumber.  Mumber.  Mumber.  Mumber.  Mumber.  Mumber.  Walue.   Vessels	Districters	Districts.   Camer.   Camer.	Seels   Souther   Cill Nets   Camer   Cill Nets   Camer   Cill Nets   Camer   Cit   Control   Cit   Control   Cit   Control   Cit   Control   Cit   Control   Cit   Cit   Control   Cit   Cit	11   185   5500   1   1   185   5500   1   1   185   5500   1   1   185   5500   1   1   185   5500   1   1   185   5500   1   1   185   1   1   185   1   1   1   185   1   1   1   1   1   1   1   1   1	Seels   Seel	Second   S	Coll Nets.   Col	Coll Nets.   Col	Southern   Southern	

SESSIONAL PAPER No. 22

RETURN Showing the Kinds and Quantities of Fish and Fish Products in the County of Digby, Province of Nova Scotia, for the Year 1907.

	Number,	-	80 2	20 50 4	50 50 7	20 30 30		75 12	50 13	50 14 60 15	10 16		35
	Total Value of all Fish.	99 C	222,855 8	209,476 35,036 5	88,614 2 52,571 8 96,915 5	39,028 2 33,144 3			21,561 5	17,977 5 22,071 6	19,598 1		1 204 594 5
	Clams, brls.		125		30	- 80	3500	350	2250	190	120	7290	14580
	Fish as manure, bris.	2000	6320	7730	5700 980 3000	1128	3000	800	225	125	65	42078	01090
	Fish as bait, brls.		006	2500 990	900 460 1000	608	900	450	:		:	10428	18040
	Fish oil, galls.	1000	0008	1400 1400	4350 850 3000	920	5000	12		40	320	33055	0016
	Coarse and mixed fish, brls.	000	2000	8230 1350	2100 180 565	1380	7450	115				32460	0 4000
	Squid, brls.	2	1000	220	100 15 200	137	20 20	t -	:	::	:	1499	1000
	Tom cod or frost ash, lb.	000	2000	500	300	: :	200	بالثند	:	: :	:	9100	020
DUCTS.	Flounders, lb.	2	000	820 700	980 700 360	1040	200	450	•	: :	:	7620	000
н Рвог	Smelts, lb.				300	200	500	8300	006		:	13600	1000
Fish	Trout, lb.		40	170	100	45	100	110			:	999	100
Kinds of Fish and Fish Products.	Halibut, lb.	3	35000	10200	1700 800 2000	1100	170761	09			:	249271	0000
S OF E	Pollock, cwt.	2	21350 9620	6230	200 670 500	069	2300	530	300	330	210	45895	a Cotto
KINI	Наке, sounds, lb.		2000	11600	5000 1800 6350	1900	7000	15			:	43415	1 200
	Hake, dried, cwt	2	2500 4500	30030	7050 8960 8825	2555	19630	120			:	89220	000000
	Haddock, smoked, (finnan haddies) lb.	900	20130	3500	$\begin{array}{c} 141930 \\ 20000 \\ 242350 \end{array}$	500	1450130					2008540	4004
	Haddock, dried, cwt.		3500	830	850 120 100		3465			145	460	11705	40000
	Haddock, fresh, lb.		146200 300000	296800 127100	660500 167000 352180	148850	75000	83700	370000		·	2959560	00000
	Cod tongues and sounds, bris.	à	130	75	15 00 00						:	503	1000
	Districts.	Digby County.	WestportFreeport.	Grove4 Tidville & East Ferry	Little River and Whale Cove Sandy & Mink Coves Centreville.	8 Gulliver's Cove to Waterford	10 Digby and vicinity 11 Smith's Cove and	lympton to Wey-	13 Belliveau's Cove and	14 Comeau ville and vicinity 15 Meteghan and River.	16 Cape St. Mary to county line	Totals.	V.J.
	Number.  District	Digby Co	2 Freeport	Grove	5 Little Ri Whale Co 6 Sandy & Mi 7 Centreville.	8 Gulliver's Waterford	10 Digby and 11 Smith's C	12 Plympton to mouth.	13 Belliveau's	14 Comeau v vicinity	16 Cape St. county li	To	

8-9 EDWARD VII., A. 1909

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the County of Annapolis, Province of Nova Scotia, for the Year 1907.

	1	Number,		-28470012	12	2	77
	d, lb.	Herring, smoke		4000 3500 5500 5500 1000 5000 5000 5000 5	:	029	194
F FISH	.dI	Herring, fresh,		10 &1	15000	129800 6200	1908
Kinds of Fish.	brls.	Herring, salted,		38.0 37.0 35.0 102.0 17.0 69.0 69.0	:	4990	0.1050
3	.d.	Salmon, fresh, l		30000	18800	58300	11660
	Piers and harves.	Value.	66	30000	:	0009	
NI CE	Piers and Wharves.	Zumber.		· · · · · · · · · · · · · · · · · · ·	:	13	-
OTHER FIXTURES USED IN FISHERIES.	Smoke and Fish- Houses.	.anls.V	60	2500 2500 2500 2500	:	11076	
FIXTURES	Sm	Number.		1240884848 18408848	:	569	
THER I	Freezers and Ice- Houses.	Value.	·Fe	3000		77.5	
0	Fre and Ho	Number.		HOM: H: H:	:	12	
TIER VT.	3.	Value.	60	775 575 500 2080 3800 1200 1000 1950 	:	11755	
LOBSTER PLANT.	Traps.	Number.		775 600 600 2775 2080 3880 1000 1000 1950		11755	
Ľ.	Weirs.	Value.	ØÐ.	200 200 350 400 400	009	3050	
SRIA	8	Zumber.		HW :0 : : : : : : : : : : : : : : : : : :	9	13	
.Tvr)	wls.	Value.	09	12 60 54 500 24 125 24 120 124 620 184 920 120 500 92 460 500 2500 264 1320 15 75	50	7350	
OR 1	Trawls.	Number.		12 124 124 126 126 126 126 127 127 127 127 127 127 127 127 127 127	10	1424	
EAR	700	Value,	<b>69</b>	670 590 1224 400 11(40 920 690 690 100 100	490	6924	
FISHING GEAR OR MATERIALS.	Gill Nets.	Fathoms.		2010 1770 3780 3780 3120 2760 2760 2760 2760 3000	066	18780 6924 1424	
713	5	Number.		650 1040 1040 1040 100 100 100 100	100	747	
		Men.		20 20 10 10 10 10 10 10 10 10 10 10 10 10 10	140	590	
Boars	Boats.	Value.	≎.	94 475 747 747 740 1050 1050 1050 1050 1050 1050	200	10394	
INVI		Number,		024 22 31 16 44 31 16 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	140	448	
SSELS		Men.		10 10 125 22	:	167	
Perhing Vessels and Boats.	ressels.	Value.	€€	625 8400 900	:	11025	
Ish	>	Tonnage.		284	:	421	
paint		Number.		61 : : : : : : : : : : : : : : : : : : :	<del>:</del>	16	İ
	Dismitters		Annapolis Co.		quille, includ- ing Round Hill River	Totals	Volues

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Annapolis, Province of Nova Scotia, for the Year 1907.

	Number.		50   50   50   50   50   50   50   50	1.5	00
	TOTAL VALUE OF ALL FISH.	ets.	9,889 2 10,4451 11,6451 11,6451 12,158 27,158 47,756 19,7741 4,506 5,828	2000	308,915 0
	Clams, brls.		1200	2705	0110
	Fish as manure, byls.		300 400 609 320 11550 1 000 6000 850 850	20805	11498 10403 5410
	Fish as bait, brls.		100 460 1160 380 930 11190 750 12200 1520		
	Fish oil, galls.		100 1100 1150 320 320 250 250 1200 500 500	4835	552 1450
	Squid, bils.		20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
	Tom cod or frost fish,		500 1700 1700 1500 1400 1100 1100 1100 1200 800	14	432
	Flounders, 1b.		1000 4500 1500 1600 1600 1200 1200 1000 500 700	13	582
	Base, lb.		500	550	50
	Alewives or gaspereau, brls,			32	128
	Shad, brls.		170	110	11001
FISH.	Trout, 1b.		009	0000	600,1100
KINDS OF FISH	Halibut, lb.		2000 1000 1000 1000 1000 1000 1000 1000		2400
Kin	Pollock, cwt.		4445 360 360 350 350 350 350 350 350 350 350 350 35	8560	25680
	Hake sounds, lb.		255 255 255 255 1100 1100 1100 1100 1100	Prof.	4292
	Hake, dried, cwt.		300 8800 8800 8800 8800	21820	65460
	Haddock, smoked, thansn haddies) lu		3000 115000 15000	43500	2610
	Haddock, dried, ewt.		400 825 825 825 825 825 825 825 825 825 825	7540	26390
	Haddock, fresh, lb.	-	2000 7200 7200 10000 17000 60000 20000 704000 6000	1017200	30516
	Cod, dried, ewt.	-	888 880 880 880 880 880 880 880 880 880	4257	21285
	Lobsters, fresh in shell, cwt.		30 168 900 119 1770 1770 1770 1800		01009
	Дипирет. В ТВПСТЗ.	Annapolis Co.	1 Margaretsville 2 Port George 3 Port Lorne 4 Hampton 5 Phinney's Cove 6 Parker's Cove 7 Hillsburn 8 Litchfield 9 Port Wade 11 O'victoria Beach 11 Clementsport 12 Annapolis Basin and River Lequille, in- cluding Round Hill River		Values

8-9 EDWARD VII., A. 1909

Return showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., in the County of Kings, Province of Nova Scotia, for the Year 1907.

		Number.		-	01004	20 p L 20	69118	130		
	.dI ,	Маскетев, fresh		1000	875 1600 1100	5100 750 500 1500	6000 5000 1000		24425	2931
ISH.	.dl ,b	Herring, smoke		1000	13000 400000		2000 15000 30000		101000	2020
KINDS OF FISH.	.dI	Herring, fresh,		31900	32200 500000 35000	22500 70000 23000 10000	24000 20000 18000 4800		341400	3414
Kind	, brls.	Herring, salted		25	125 110 250	183 400 66 66 225	230 55 3		1686	8430
	•d1	Salmon, fresh, l		22400	27000 20000 44000	40000 64000 26500 20000	19200 9100 600 350	1400	294550	58910
3	irs.	Value.	÷	750	500 900 750	500 500 750	500 750 250 200	:	6850	
	Weirs.	Number.		es .	0.40	01010100	o o n n	:	28	
ALS.	Trawls.	Value.	¥;	:	75	150 425 325	22	:	1140	
TERIA	Tra	Number.		:	70	10 35 25	6.4	:	85	1 :
Fishing Gear or Materials.		Value.	<b>6</b>	200	200 300 350	225 200 350 350	300 1300 1000 800		4525	
GEAR O	Seines.	Fathoms.		300:	300 400 450	300	350 3500 250 2000		8800	
IING	The second secon	Number.		ಣ	010000	0101010	ผฐนา	:	26	:
Fise	zó.	Value,	SO.	175	150 300 100	325 325 350	125 230 125 50	850	2930	
	Gill-Nets.	Fathoms.		400	445 500 250	410 800 1200	100 100 40	1800	6495	
	5	Number.		10	101	14 37 45	30 2 2 2 2	12	200	
gå		Men.		20	899	45 6 35 85	10 16 16 9	20	263	1
FISHING VESSELS AND BOATS.	Boats.	Value.	<b>≎</b> €	250	120 225 200	235 525 52 500	1300 170 170 165	300	4102	:
3 ANI		Zumber.		12	123	25 42 25	70 51 × F	11	147	1:
ESSEL		Men.		:	: च्या ००	679	6		24	
ING VE	Vessels.	Value.	€	:	700	350	006	:	2375	
FISH	>	Tonnage.		:	50	388 : :		:	217	
		Number.		:	:01	На : :	: :00 :	:	] S	S.
	ş	Number.	Kings County.	1 Morden and vicinity	2. Victoria Harbour and Ogilvie Wharf 3. Harbourville	5 Chipman's Brook and Hunting Point ing Point 6 Hall's Harbour 7 Race Pt. and Shefield Vault. 8 Bavver's Harbour	9 Whalen Beach and Well's Cove. 10 Scott's Bay. 11 Blomidon and Kingsport. 12 Staur's Point to Wolfville.	13 Avonport to County line and inland waters	Totals	Values

SESSIONAL PAPER No. 22

for RETURN Showing the Kinds and Quantities of Fish and Fish Products in the County of Kings, Province of Nova Scotia, the Year 1907.

	Number.		1	000	0000	50 50 50 11 50 12	50 13		0
	TOTAL VALUE OF ALL, FISH.	& cts.	8,306 50	8,221 00 7,153 60 15,485 50	13,625 00 22,384 00 7,633 00 9,425 50	7,057 5 12,054 0 13,340 0 1,248 5	1,543 5	4 8 7 8 9 9	127,476 60
	Clams, brls.		:	0 0 0 0 1 0 0 0 0		 1250		1275	2550
	Fish as manure, brls.		250	200 250 250	900 4000 900 2000	1600 5000 12100 625	14	27891	13945
	.elrd, tisd as dail.		375	370 400 374	470 500 260 376	105 850 60 80	20	4153	6230
	Fish oil, galls.		6 6 6	12	100		:	387	116
	Flounders, lb.		*			00008	:	80000	2400
	Bass, lb.		450	400 850	650 1900 520 470	350 450 250	:	6290	629
	Alewives or grapereau, brls.		55	200	22 22 22	1257	100	422	1688
÷	Smelts, lb.		4000			0 0 0		4000	200
Kinds of Fish.	Shad, bris.		:			55 S	L-	128	1280
CINDS	Trout, lb.		2600				47.00	10300	1030
×	Halibut, lb.		800	420	1450	400 1200 1800 650	:	7020	702
	Pollock, cwt.		244	25	90 84 90 115	60 00 00 00 00	ಣ	995	2988
	Hake, dried, cwt.		:	P410	200.000	17		159	477
	Haddock, dried, ewt.	w		2	500	10		120	420
	Haddock, fresh, lb.		1600	1150 1800 4000	14500 29900 600 17300	10000 20600 6500 1200		109150	3275
	Cod, dried, cwt		98	58 44 270	92 217 21 226	260 260 40 19	09	1413	7065
	Lobsters, fresh in shell, cwt.		24	75 50 125	120 100 8 4	110		678	6780
	Vumber.	Kings County.	1 Morden and vicinity	Victoria Harbour and Ogilvie Wharf. 3 Harbourville.	Chipman's Brook and Hunting Point.  6 Hall's Harbour  7 Race Pt. and Shefield Vault. 8 Raxter's Harbour.	9 Whalen Beach and Well's Cove 10 Scott's Bay 11 Blomidon and Kingsport 19 Starr's Point to Wolfville		Totals	Values

### RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 3, Nova Scotia, for the Year 1907.

Kinds of Fish.	Quantity.	Rate.	Value.	Total Value.
		\$ cts.	\$ cts.	\$ cts
Salmon, fresh	446,305 1,280	0 20 0 20	89,261 00 256	
Herring, pickled Brls.  " fresh Lb. " smoked "	$\begin{array}{r} 34,728 \\ 4,889,550 \\ 426,500 \end{array}$	5 00 0 01 0 02	173,640 00 48,895 50 8,530 00	89,517 00
Mackerel, fresh	392,305 3,348	0 12 15 00	47,076 60 50,220 00	231,065 50
Lobsters, preserved Lb. fresh in shell	1,745,184 63,619	0 30 10 00	523,555 20 636,190 00	97,296 60
Cod, dried	271,148 52,710 844	5 00 3 00 10 00	1,355,940 00 158,130 00 8,440 00	1,159,745 20
Haddock, fresh	6,498,485 33,603 2,102,040	0 03 3 50 0 06	194,954 55 117,610 50 126,122 40	1,522,310 00
Hake, dried	115,854 60,995	3 00 0 25	347,562 00 15,248 75	438,687 45
Pollock         Cwt.           Halibut         Lb.           Irout         "           Shad         Brls.           Alewives         "           Smelts         Lb.           Bass         "           Eels         Brls.           Clams         "           Squid         "           Flounders         Lb.           I or cod or frost fish         Brls.           Mixed fish         Brls.           Fish oil         Galls.           " as bait         Brls.           " as fertilizer         Brls.           Seal skins         No.	79,575 493,101 105,665 328 5,889 124,100 6,840 538 12,714 2,162 361,620 82,100 38,032 124,925 56,256 92,372 49	3 00 0 10 0 10 10 00 4 00 0 05 0 10 10 00 2 00 4 00 0 03 0 03 2 00 0 30 0 03 0 03 0 05 0 05 0 05 0 05 0		362,810 75 238,725 00 49,310 10 10,566 50 3,280 00 23,556 00 6,205 00 684 00 5,380 00 25,428 00 8,648 00 10,848 60 2,463 00 76,064 00 37,477 50 84,384 00 46,186 00 61 25
Total for 1907				4,530,699 45 4,327,577 95
Increase				203,121 50

### RECAPITULATION

Of the Value of Fishing Vessels, Boats, Nets, &c., in District No. 3, Nova Scotia, for the Year 1907.

Articles.	Value.	Totals.
	\$	\$
442 fishing vessels (16,063 tons)	864,765 153,026	1 017 701
28,222 gill nets (759,765 fathoms) 252 seines (29,845 fathoms) 165 trap nets 5,124 trawls 77 weirs 113 smelt nets 22,131 hand lines	214,897 38,065 49,600 96,870 16,450 1,469 19,412	1,017,791 436,763
60 lobster canneries, &c	59,300 195,395	254,695
156 freezers and ice-houses 1,989 smoke and fish-houses 805 fishing piers wharfs 148 "tugs and smacks	38,855 119,296 279,850 121,675	559,676
Total		2,268,925

## STATEMENT of number of men employed, 1907.

Number of men fishing in vessels	3,919 8,510
Persons employed in lobster canneries	1,007
Total number of persons	13,436

SHOWING the Number of Vessels and Boats and the Quantity and Value of all Fishing Materials used in the Fishing Industry in the Province of Nova Scotia, for the Year 1907-8. RECAPITULATION BY COUNTIES

SHOWING the Number of Vessels and Boats and the Quantity and Value of all Fishing Materials used in the Fishing Industry in the Province of Nova Scotia, for the Year 1907-8. RECAPITULATION BY COUNTIES

NG.	Tugs, Steamers and smacks	.aulaV		10 1905 10 7100		2000	19 27640 14 11690		10 42 18700 66 68500 17 13425		243 181830
ISHI	St	Number.		,		: : :				; : l	
H NI	Piers and wharfs.	Value.		8023 4700 55340		5000	<b>=</b> •		°000	9009	356258
USED	P wh	Number.		255		٠	2 203		0 211 0 211 0 43 0 107		2 206
TURES	Smoke and fish-houses	Value.		9182 8798 29030		335	1101		10210 20840 16000 27270		39298
FIX	Sm ar fish-b	Number.		218 1330 198	6		710 944 2		313 359 126 332		6248
OTHER FIXTURES USED IN FISHING	Freezers and Ice-houses.	Value.		11040 4805 4920			127375		1640 6850 17200 10110		399 213135 6243 392982 2063 562552
	Fre Ice-h	Number.	144	0 1 4 T		: :	36		81 28 4		1
	ui bəy	Persons employ		213 147 259		331			85 263 322 219		325
ANT.	ps.	.9nlæV		31020 13885 28300			63610 44129				209980 636400 491005 3254
LOBSTER PLANT.	Traps.	Number.		32365 13886 47900			85620 85620		17800 74500 45180 34105		636400
Lobst	eries.	Value	\$	20700 4650 11780		25125 1400 31050					209980
	Canneries	Number.		12.		23 22 23 23	:		8545	: :	217
M.S.		Value.	\$689	1450 1673 1718		92009	147 4175 3693 90	3486	180 9682 2125 2084		36353
[ATERIA	Hand Lines.	Number.	5267	2314 1653 2043			286 4890 7388 120	6685	360 6409 4285 2419	1173	46383
or M	1	Value.	\$ 410	26		67 1802 10 145 60 2600	625 625 427		245 245 180 664		408 7968
FEAR	Smelt Nets.	Number.	36	19				19	1300	: :	
FISHING GRAR OR MATERIALS.	Weirs.	Value.	÷.			1100	185		:	3050	17910
Fis	We	Number.				0.4:	.800			36188	104
	8	COUNTRY	District No. 1.	2 Cape Breton 3 Victoria 4 Inverness	District No. 2.	5 Cumberland 6 Colchester 7 Picton	S Antigonish. 9 Guysborough. 10 Halifax	District No. 3.	2 Lunenburg 13 Queens 14 Shelburne 15 Yarmouth	19 Digby 17 Annapolis Wings	Totals

# RECAPITULATION BY COUNTIES

SHOWING the Kinds and Quantities of Fish and Fish Products in the Province of Nova Scotia, for the Year 1907-8.

Number.	379 1 22 2 24 4 400 4 400	5 1576 10268 1790 10 1790 11	410 12 13 14 14 17 17 17 17 17 17 18	75408
Hake, sounds, lb.	: •		:::42:	
Hake, dried, cwt.	997 65. 172. 2490	106 8 80 976 2996 2656	3209 326 1120 89220 21820 159	12640
Haddock, smoked, (finnan had	275000	170830	1000 5000 	2549870 126400
Haddock, dried, cwt.	9722 4066 6940 3080	117 17 152 7313 1896	6666 4940 2632 11705 7540 120	90699
Haddock, fresh, lb.	617400 31330 12200	1760 2000 2800 11300 3582400 296390	21600 4000 721170 1665805 2959560 1017200 109150	84279 400112 1101 11056065
Cod, tongues and sounds, bris.	104	522	136 17 28 160 503	1101
Cod, dried, cwt.	16577 29859 7023 24877	215 187 222 222 878 24285 24782 59	138335 11300 53385 *52710 62458 4257 1413	400112
Lobsters, fresh in shell, cwt.	587 2631 27 1535	1154 3429 11297	2160 4685 11047 31200 7845 6004 678	84279
Lobsters, preserved in cans, lb.	119678 212656 106644 254756	463296 38976 432912 171888 401848 322488	140608 116160 645458 689660 153298	4270346
Mackerel, salted, brls.	10066 1303 344 2853	129 5512 607	2375 180 793	24162
Mackerel, fresh, lb.	105100 38530 12075 5000	1,950 4120 13400 684900 1193960	17680 115000 76350 135000 23850	2451340
Herring, smoked, lb.		1000 1000 222900 1000 25500 1000 25500 25500 25500 25500 2550000 255000 255000 255000 255000 255000 255000 255000 255000 25500000 255000 255000 255000 255000 255000 255000 255000 255000 2550000 255000 255000 255000 255000 255000 255000 255000 255000 2550000 255000 255000 255000 255000 255000 255000 255000 255000 2550000 255000 255000 255000 255000 255000 255000 255000 255000 2550000 255000 255000 255000 255000 255000 255000 255000 255000 2550000 2550000 2550000 2550000 2550000 2550000 2550000 2550000 25500000000	3000 \$200 \$250 304850 6200 101000	022699
Herring, fresh, lb.	115150 49600 42900 433250	42300 1000 85500 49000 1182006 130120	30700 8000 860710 1798240 1720700 129800 341400	7020370 669276
Herring, salted, brls.	7492 13330 1511 4103	902 250 539 11231 10764	12497 2710 10460 2885 4990 1686	84890
Зяјшон, втокеd, јр.	1900	2800	750	14280
Salmon, preserved in cans, lb.	690	2700		10170
Salmon, fresh, lb.	4410 21290 9520 116650	7900 35660 49150 73100 60050 43069 13500	23100 24300 12055 34000 58300 58300	880604
Counties,	District No. 1.  [Kichmond 2 Cape Breton 3 Victoria 4 Inverness	5 Cumberland 6 Colchester 7 Pictou 8 Antigonish 9 Guysborough 10 Halfax	District No. 3. 2 Lunenburg 3 Queens 4 Shelburne 5 Yarmouth 7 Annapolis 8 Kings	Totals
Zumber.	1 Kichmond 2 Cape Brete 3 Victoria	5 Cumberlanc 6 Colchester. 7 Pictou 8 Antigonish 9 Guysboroug 10 Halifax	2 Lunc 3 Quee 4 Shell 5 Yarm 6 Digb 7 Anns 8 King	

\* Of this 52,710 cwts, in Yarmouth Co, is disposed of fresh at \$3 per cwt,

RECAPITULATION BY COUNTIES

11	Kumber.	F 63 55 4	110 9 8 7 6 5 1	22.24.25.25.25.25.25.25.25.25.25.25.25.25.25.
	ALL	ets. 30.55.55.	9228338	61 60 55 50 50 50 50 50 50 50 50 50 50 50 50
1907-8.	TOTAL VALUE OF FISH.	448,598 367,325 120,844 344,557	180,789 23,999 153,572 83,320 777,130 597,148 4,345	942,604 210,722 769,747 866,648 1,304,584 308,915 127,476
Year	Seal skins, No.			45170
the Ye	Fish as manure, brls.	1150	1235 380 4250 1782 9532 3696	2795 178 1675 870 1970 1050 10428 42078 7663 4208 4153 27801
for	Fish as bait, brls.	1344 5108 575 4740	1487 1404 1404 6925 2779	1
Scotia,	rish oil, galls.	9418 4150 6233 11215	149 70 750 28849 9260	2185 85503 80 8650 73 14970 8234 12310 82460 38055 8356 8357 84835 887 887 887
	Coarse and mixed fish, brls.	1176 90 32 1235	18 25 218 2044 1641	2185 80 73 3234 32460 
Nova	Squid, bris.	688 125 386 1075	25 294 294 183	200 155 170 170 1499 138 138
Jo	Torn cod or frost fish, Ib.	27700 5100 4200 2800	3000	77 236000 22100 200 25 8500 155 720 3000 31500 170 7290 7620 3100 1490 2705 15400 14400 138 1275 8900
Province	Flounders, lb.	193550 8100 5700	800  9700 20800 123400	236000 8500 7100 3000 7620 19400 8000
the Pro	Olama, brls.	1121	40 500 25 7102 7190	
	Oysters, brls.	45 103 550	279 250 65 65 40 40	1337
ts in	Hels, pris.	451 246 146 361	8 90 643 265	78 78 52 330 
Products	Bass, lb.		200 3000 1200 1006	7.8 7.8 7.8 5.5 6.290 6.290 1.2240 2816 1337
	Alewives or Gaspereau, brls.	2582	431 105 175 8 642 404 260	70 705 705 4025 32 422 422 1579
d Fish	Smelts, lb.	58950 17900 3225 21300	54675 13600 71522 14000 45825 29350	21300 7 10500 575 500 67700 4025 1100 422 128 4000 422 128 4000 422 773 454447 9579
and	Shad, bris.	. : 43	295 64  12 3	110 110 128 773
f Fish	Trout, lb.	4885 5340 1950 4100	1330 3800 1700 550 22250 13550 4800	800 21500 7300 59100 665 6000 10300
ties of	Halibut, lb.	30620 72920 14250 3150	4870 2500 136430 89990	2929 11000 21500 2929 11000 21500 11676 96500 59100 45835 24927 665 8560 24900 6090 995 7020 16590
Quantities	Pollock, ewt.	2987 2624 1330 28	192 4 20079 5021 5021	1984 2920 7605 11616 45895 8560 995
Showing the Kinds and Q	Vumber,	District No. 1.  1 Richmond. 2 Capte Breton. 3 Victoria 4 Inverness.	5 Cumberland 6 Colchester 7 Picton 7 Autonia 9 Gursborough 10 Halifax 11 Hants	District No. 3.  12 Lamenburg 13 Chreens. 14 Shelburne. 15 Yarmouth 16 Dighy. 17 Amapolis 18 Kings. Totals.

### RECAPITULATION

()<sub>F</sub> the Fisheries of the whole of Nova Scotia, for the Year 1907-8.

		1		
Kinds of Fish.	Quantity.	Rate.	Value.	Total Value.
1		\$ cts.	\$ cts.	\$ ets.
Salmon, freshLb.  preserved	880,604 10,170 14,280	0 20 0 20	$\begin{array}{c} 154,405 \   85 \\ 1,525 \   50 \\ 2,856 \   00 \end{array}$	158,787 35
Herring, pickled Brls.  "fresh Lb. "smoked "	84,890 7,020,370 669,270	0 01 0 02	412,587 00 70,203 70- 13,385 40	496,176 10
Mackerel, fresh	2,451,340 24,162	$\begin{array}{c} 0 \ 12 \\ 15 \ 00 \end{array}$	294,160 80 362,430 00	656,590 80
Lobsters, preserved	4,270,346 84,279	0 30	1,281,103 80 771,250 00	2,052,353 80
Cod, dried	400,112 5,580,400 1,101	5 00 0 03 10 00	2,000,560 00 167,412 00 11,010 00	2,178,982 00
Haddock, fresh Lb.  dried Cwt.  finnan haddies) . Lb.	11,056,065 66,906 2,549,870	0 03 3 50 0 06	331,681 95 234,171 00 152,992 20	718,845 15
Hake, dried	126,400 75,408	3 00 0 25	375,789 00 18,852 00	394,641 00
Pollock         Cwt.           Halitut         Lb.           Trout         Brls.           Shad         Brls.           Alewives         Lb.           Smelts         Lb.           Bass         Brls.           Clams         "           Oysters         "           Squid         "           Flounders         Lb.           Tom cod or frost fish         Brls.           Mixed fish         Brls.           Fish oil         Galls.           " as bait         Brls.	00,404	3 00 0 10 0 10 10 00 4 00  0 10 10 00 2 00  0 03 0 03 2 00 0 30 1 50		335,535 00 84,774 10 16,992 00 7,730 00 38,316 00 29,591 51 1,224 00 28,160 00 44,324 00 8,022 00 19,752 00 21,710 10 5,184 00 89,022 00 58,505 70 129,651 00
" as batt. " as fertilizer. " Seal skins. "No.	114,497 170	0 50 1 25		57,248 50
Total for 1907				7,632,330 63 7,799,159 93
Decrease in 1907				. 166,829 31

### RECAPITULATION

Of the Capital invested in the Fisheries of the whole of Nova Scotia, as Vessels, Boats, Nets, &c., for the Year 1907-8.

	Articles.	Val	lue.	Total.
		\$	cts.	\$ cts
671 14,746	fishing vessels (20,268 tons)boats		320 00 793 00	1 900 119 0
699 333 12,650	gill nets (2,059,610 fathoms)seines (79,157 fathoms)trap nets.trawls.	160, 110, 152,	498 00 765 00 020 00 930 00	1,392,113 00
408	weirssmelt netshand lines	7,	910 00 968 00 353 00	1.025,444 0
217 636,400	lobster canneries, etc		980 00 005 00	_,,
6,243 $2,063$	freezers and ice-houses. smoke and fish-houses. piers and wharfs. tugs and smacks.	392, 562,	135 00 982 00 552 00 830 00	700,985 00
240	tugs and smacks	101,		1,350,499 0
	Total			4,469,041

Statement of persons engaged in the Fisheries of the whole of Nova Scotia, in the season 1907.

Men in fishing vessels  boats	5,034 18,509 3,254
Total	26,797

### APPENDIX No. 6

## PROVINCE OF QUEBEC.

GULF OF ST. LAWRENCE DISTRICT, BY INSPECTOR WM. WAKE-HAM, M.D., GASPÉ BASIN.

INLAND DISTRICTS, BY INSPECTORS JOSEPH RIENDEAU, OF MON-TREAL, AND A. H. BELLIVEAU, OF OTTAWA.

GASPÉ, April 1, 1908.

To the Dominion Commissioner of Fisheries, Ottawa.

SIR,—I beg to submit the tabulated statement of the Fisheries of the Gulf of St. Lawrence division, province of Quebec, for the season just closed. As foretold in the preliminary report, some of the branches of the fishery show a considerable falling off. This I think was clearly due to the very unusual weather conditions which prevailed during the entire fishing season of 1907. The season was nearly three weeks late in opening; ice was present in the southern waters of the gulf until towards the end of May. The fishery protection ship *Princess* which patrols the waters of the Gulf division, having passed the winter in Pictou, N.S. was unable to get out of that harbour till the 20th May, and then had to pass westward through about fifty miles of ice in the Strait of Northumberland before she could reach the open water of the gulf. was, at that late date, impossible to reach the Magdalen Islands by the passage east of Prince Edward Island. Under ordinary conditions the ship should have been able to leave Pictou about the 25th of April. In addition to being late the whole season was cold and rough. The fall began early. Grain, which should have ripened early in September, was cut green in October, and by the 20th of that month we had already had snow, and 12° of frost. Under these conditions we could hardly expect a very successful fishery. In spite, however, of all these untoward circumstances, the season was a profitable one to the fishermen. Prices of all kinds of fish were unusually high. In the case of dried cod, which is the great staple of the Gulf division, the total value for the season amounted to the sum of nearly nine hundred thousand dollars, fully half the value of all the combined fisheries of the division. The price paid by buyers per cwt., ran up to \$5.50, and I believe in some cases to \$6. So that in valuing the catch for the purposes of our statistics at \$4.50 per cwt., we are a long way below the actual value for the season. Fall mackerel sold at the Magdalen Islands for \$16 per barrel and so all through the various branches of the fishery - prices ruled unusually high. The great demand for Gaspé cod, and the presence along the coast of buyers from Nova Scotia and Newfoundland, who were so eager to buy fish that they took it half made and without cull, has had a bad effect with the fishermen, as they are getting extremely careless in the preparation of the fish. This will react seriously against them when prices fall, and the same demand does not exist.

These high prices, together with the great demand for labour, and the consequent high wages, made the fishing community well off, and I have never known the people of the southern coast of the division to have been as flush as they are during the

present winter of 1907 and 1908.

Unfortunately this happy condition does not hold good for the north coast, and more especially for that part of it from Natashquan ea t generally known as th

Canadian Labrador. Here the summer cod fishing, always dependent on the coming on shore of the capelin in June and July, was a very general failure, and the bulk of the people were poorly off. There was no actual distress, as the traders had left enough on the coast to tide the people over, but there is not likely to be much feasting this winter. For several years past the summer cod fishing has been below an average—so that many of the people have been getting behind. The population on the Labrador has been increasing rapidly of late years, and as new comers have nothing but the cod fishing to depend on, the salmon and seal fishing stations being all taken up by the older settlers—it is perfectly certain that sooner or later we will have serious distress on this coast. All possible efforts should be made to induce the young people of Labrador to leave the coast, and settle where they can be certain of obtaining profitable and steady employment.

### SALMON.

Salmon net fishing was fully two weeks late in opening, and as the weather was rough during the whole of the netting season, it followed that wherever the nets were exposed to the prevailing easterly winds the catch was small. In many exposed situations the nets were torn from their moorings, and washed ashore, and it was impossible for days to replace them. The rivers remained high till towards the close of the season—as during June and the early part of July we had rain almost every day. The early sportsmen did poorly; those, however, who remained till towards the close of the fishing season enjoyed good sport, as when the waters fell plenty of fish were found in the pools.

It was generally noticed on both shores of the gulf that the salmon were off in quality—they were not as fat as usual, and were light in colour—not as rich a kind as fresh run salmon should be.

### HERRING.

This fishery was also late in beginning at the Magdalen Islands; the ice only moved off towards the middle of May. So herring fishing began when, in ordinary seasons, it would have been closed. The sales of spring herring made to baiters were much below an average, due to the fact that the vessels were not able to make the islands in time, owing to the ice pack. Herring were as abundant as ever, and were unusually constant all season. This per nitted the fishermen to furnish themselves with a steady supply of bait for the cod fishery, and the excellence of the summer cod fishery on the south coast was due to this.

### MACKEREL.

The mackerel, like the herring, were late in arriving. When they did come they came in force, and the early fishery at the Magdalen Islands was a good one. Owing to the rough weather, however, the fish left the gulf fully two weeks earlier than usual, so that the fall fishing was below the average. More mackerel were seen in the gulf this season than we have had for years. Schools were seen off Godbout and Point de Monts where they have not been met with for a long time. I attribute this to the fact that for several seasons back the catches made by U. S. purse seiners, off the Nova Scotia coast in May and June have been poor—the schools have thus escaped destruction, and have been permitted, as nature intended they should, to reach their natural spawning grounds in the inner gulf. I have not the slightest doubt that if this practice of destroying the ripe mackerel while on their way to the spawning grounds could be prohibited, these fish would soon be as abundant in the gulf of St. Lawrence as ever they were. I would be perfectly willing to allow the general use of the purse seine in August, September and October, if its employment in May and June could be prohibited north of Cape Sable.

### LOBSTERS.

The lobster pack shows an increase of some 20,000 lbs. I think this was due to the use of a greater number of traps. The returns show that while in 1906, 89,635 traps were fished by 78 canneries, 108,390 traps were fished in 1907. We also had a few

more canneries in operation.

There is a general feeling at the Magdalen Islands that the September fishing should be done away with. On the western and northern shore of the island it is impossible to fish lobster traps in September, so that it is only in Pleasant Bay and at Grand Entry that fishermen and canners can avail themselves of this fall fishing. Experience has also shown that the lobsters are not of good quality during the month of Septemberthey are watery and empty. Canning at this season is wasteful in the extreme, and the quality of the pack, poor. I have no hesitation whatever in saying that most of those who advocate September fishing, both canners and fishermen, do so because they wish to violate the law by fishing in the lagoons. The fact that canneries can be kept open in September offers a cloak for the canning of illegally caught lobsters. I was never in favour of this September open season for lobsters, and thought at the time it was decided to permit it, that it was only to be allowed for three seasons, as an experiment. I consider that a far better and safer rule for the Magdalen Islands would be, to allow a two weeks longer spring season, and do away altogether with this fall fishing. I believe that every honest and intelligent packer and fisherman at the islands will agree with me in this. At Anticosti the rough season made fishing traps almost an impossibility; time and again the traps were washed ashore and wrecked. On the north coast and Labrador the lobster fishery never has amounted to anything. It never has been, and could not be carried on to any extended scale. A few of those who fish cod, engage also in lobster packing, the men who work in the canneries doing their own fishing, most of them only putting up a dozen or two cases. Fishing for lobsters only begins with the end of June, so that on the north shore they have at most only about a month's fishing. On the south coast in Gaspé and Bonaventure the fishing is going from bad to worse, and it is only a question of time when it will be necessary to shut down for a term of years. Many of the canners now propose some scheme of this kind. They would like to have timely notice, so as to work off the material on hand, and at the same time be given a guarantee that no new licenses would be issued, and that those who own and operate canneries now should be renewed in their licenses when the fishing began again. Such an arrangement would seem to be possible and reasonable.

COD.

The summer cod fishing on the south coast was good. Bait in the shape of herring was plentiful during most of the fishing. This always means good fishing, as given a supply of fresh bait, you are fairly certain of good cod fishing, On the north coast from Mingan west the fishing was fair, while east from Esquimaux Point to St. Augustin the fishery was an almost complete failure. This was entirely due to the fact that the capelin never struck that part of the coast. From St. Augustin east on down through the strait of Belle Isle the catch was a most abundant one.

The statistics show a marked decrease in the number of vessels, boats, and men engaged in the fishery. The great demand for labour at the lumber mills and camps, on the railway building at Bonaventure and Gaspé, and on the large number of government works, such as wharfs, and breakwaters, being built along the coast, and the consequent high wages offered, has taken many men away from the fishery. The younger men are giving up the fishing and seeking other employment. Most of them will never return to the fishing. At one time, not very long ago, upwards of 200 boats used to be fitted out at Percé, one of the oldest fishing stations, and no difficulty was found in securing men to man them; now not more than 50 boats are sent to the fisheries from this station, and it is difficult to find men for even this diminished number.

Failing to secure the number of men required to keep up the boat fishing our outfitting firms are looking about them for some means of keeping up their supply of cod or other methods of fishing, requiring fewer hands. The remedy seems to be the use i steam, and the employment of the beam trawl I expect soon to see a couple of steam trawlers at work in the gulf. Many banks are known whereon the beam trawl could work, and expert trawlers are likely soon to find other bottoms not at present known.

I beg to append synopsis of the reports of such of the local officers who have furnished

tnem.

I have the honor to be, sir,

Your obedient servant,

WM. WAKEHAM,

Officer in charge of the Gulf of St. Lawrence Division.

### SYNOPSES OF REPORTS OF LOCAL OFFICERS.

Mr. George Forest, F. O., Bonaventure, reports that the fishery on the whole was go if in the upper part of the Bay des Chaleurs in spite of the fact that we had so much bad weather practically throughout the whole time of the fishing, while fewer men than usual engaged in the fishing. Spring herring were abundant, but these fish became scarce during the summer and autumn. The fishery regulations were well observed.

Mr. F. X. Chapados, F. O., Anse-à-Gascon, reports that herring which were very abundant in the spring, continued plentiful up to August, but became scarce after that month. Squid were not abundant. The lobster pack shows a slight increase. The salmon fishery was a poor one. Cod were abundant as long as the bait continued plentiful but the fall fishing was poor

Mr. A. T. Carter, F. O., Gaspi, reports that the salmon fishery shows a decrease as compared with 1906. These fish struck about the 26th May, the bulk of the fish only ame in after the nets were up. This is shown by the large quantity of fish reported in the rivers. The prices were lower than those of the previous year. Fly fishermen had good sport, they were well satisfied, and report the rivers well stocked. Spring herring were good, plentiful : they were of large size : very few were salted except for bait. Herring were abundant all along the coast throughout the whole season. Fishermen report that they never saw them more plentiful. It seems strange that these fish are not put up in large quantities for consumption. Squid were plentiful, but the fishermen generally used herring. Capelin and launce were scarce. Ced fishing commenced about the 25th May. The eatch shows a slight decrease as compared with that of 1906. This seems due to the fact that not nearly so many boats fished, owing to so many of the fishermen working at the mills and on the railroad. Fish were abundant all along the coast throughout the whole season. The season was a most peculiar one, as we had rain every other day from May to November. One blessing for the fishermen was that the weather was cold, consequenty there was very little bad or inferior fish. The price of cod fell towards the end of the season. This was due to the foreign markets, and was considerably lower than in 1906.

Mackerel have again shown no appearance on the coast.

Lobsters show a slight decrease compared with the previous year, but the size seemed larger.

Smelt show quite an increase over last year, but the prices were a great deal lower.

This was due to the American markets where most of this fish is shipped.

Mr. Louis Letouraeau, F. O., Mont Louis, reports that in spite of the fact of the exceptionally bad weather, the season was a prosperous one among the fishermen. Salaron were not taken in as large quantities as usual by the net fishermen, but they were abundant in the rivers. Herring were not quite as plentiful as in some previous

years, and they were small. However, those who were supplied with suitable small meshed nets had all they wanted for bait. Herring bait was scarcer at Grande Vallée than elsewhere. Though the quantity of cod caught was less than in 1906 yet the fishermen really did better, as the price was higher. These fish struck two weeks later than usual, but were abundant all the senson right up to the middle of November, when it became too cold to continue fishing. We did not see any capelin, white whales, squid or mackerel.

Mr. Jos. Chevrier, F. O., Southern Subdivision of Magdalen Islands, reports, that fewer seals were taken on the ice than in 1906. Spring herring were as abundant as usual, but the fishermen did not find as great a demand for them. The buyers from the United States and the maritime provinces could not reach the islands in time, owing to the ice. The spring mackerel fishery was good both in quantity and price. The lobster catch was not as good as was expected. The pack exceeded that of last season, but this was due to their having been more traps fished. Some packers did well during the September fishing, but the exposed-position of these islands prevents most of the packers from operating during the fall season. The general opinion at the islands is that this fall fishing should be discontinued. There was some attempt made to poach in the lagoons, but with the aid of the extra guardians it was stopped. The cod fishery was an average one; the demand for cod was great and the prices paid were high.

Mr. B. Thériault, F. O., Northern Subdivision of Magdalen Islands, reports, that the catch of seals was not a large one—the ice conditions keeping the seals too far off shore. Spring herring struck in Pleasant Bay on the 5th May—but the ice remained about the islands until the 20th May. The fishing began later than usual but it was exceptionally good. Although lobster fishing began very late owing to the ice, fishermen had great hopes—unfortunately great wind storms destroyed the greater part of their fishing gear. The fall catch was not large—the total yield being of small importance, and inferior to that of last year. Spring mackerel appeared at the islands at the end of June, after the discouraged fishermen had had their nets out for several weeks, they became abundant, and the catches were very good for several days. In the fall the fishing with lines was not as good as the preceding year, as the weather was not as favourable. Cod appeared in pretty large quantities from the 20th June up to the beginning of October, the fishermen made large catches; after that date they became scarce. Wind being prevalent in the fall, fishermen only went out at rare intervals. There were no violations of the Fisheries Act.

Mr. Napoleon Comeau, F. O., reports for the Godbout subdivision, from Saguenay to Jombons, that the fishing began very late, the first salmon being taken in the nets on the 3rd June—(nearly three weeks later than usual). The weather was cold and the ice in the rivers only broke up late in May. In June the rivers were still high, and bringing down lots of debris, this coupled with strong and continuous gales of easterly wind caused a great deal of damage to the fishermen, many losing the whole of their gear and even some boats-either carried away or washed ashore. One man stated that he had lost 19 days (between 1st June and 30th July) from bad weather. As a natural consequence there was an immense falling off in the catch, it being only about one-third that of last year. Probably from the same cause, no capelin was observed on this part of the coast. However, to make up for this in some way—the cod, halibut, and herring fishery was good, the yield being nearly two thirds above the average. Very little halibut was salted this season; most of it was shipped fresh in cold storage to Quebec and Montreal. Herring were very abundant but small in size. For some unknown reason the white whales or porpoises were scarce from Manicouagan eastward—though west of the above place they were as abundant as usual. Dogfish, the genuine kind, and the so called dog fish, viz, the Greenland shark were more in evidence than in the past. It looks as if they were gradually increasing in the St. Lawrence. Two or three small schools of mackerel were seen, but only a few were taken with hook and line or in the herring nets. A few large sized shad were taken in the salmon nets in the early

part of the season. Smelt and sardines (small herring) were taken west of Manicouagan. Very little seal hunting or netting is now done owing to the low price of oil; still a fair number have been killed mostly of the harbour seal variety. The Greenland and hooded seals are disappearing rapidly from the waters of the St. Lawrence. The different fishery regulations were well observed.

Mr. Theo. Migneault, F. O., from Moisie Subdivision, reports that salmon net fishing began on May 30, and closed with the end of July—the net fishing in the waters of the Moisie was good. Mr. Adams and his five friends from Boston took 405 salmon with the fly. The cod fishing was smaller than in 1906, this was due to bad weather, the price however was high, fishermen getting from \$5.50 to \$5.65 per cwt. The fishermen gave up early and went to work at the pulp-mills. Herring were abundant in the spring but rare in the fall. A few schools of mackerel were seen off this part of the coast. (489 seals) were killed by Indians and white hunters about the islands during the course of the summer.

Seventy-seven (77) whales were taken by the Quebec Steam Whaling Co. of Seven

Islands, yielding about 25,000 galls. of oil.

Mr. Richard Joncas, F. O., Natashquan, reports the salmon fishing began on June 5, the estuary fishing in Natashquan, Agwanus and Nabisippi rivers was small owing to the high water during the season. The first cod was caught on June 5. The capelin arrived a few days later, but they only remained on the coast for two days. Most of the cod were caught on herring and clams, the cod fishing was therefore below the average. The regulations were well kept, and all went well.

### INLAND FISHERIES BY INSPECTOR RIENDEAU.

MONTREAL, April 30, 1908.

To the Dominion Commissioner of Fisheries, Ottawa.

Str,—I hereby respectfully submit my report for my district for the year 1907. In the counties of Champlain and St. Maurice, I am glad to state that the laws on fisheries have been pretty well respected, scarcely any abuses, and though the fish crop has not been a success, yet there will be in the near future a satisfactory improvement if the people continue in their reform and to convince themselves that it is in their own interest. It is to be hoped they shall do so.

In the county of Nicolet and all along the St. Lawrence the fish becomes scarcer every year. Several old fishermen told me they intended to abandon the fishing industry, as they could not earn a living by it. They assign this failure to the too large

number of hoop-nets, seines and gill nets; and right they are, in my opinion.

In the counties of Yamaska and Richelieu, no progress in fishing can be ascertained. Most of the fish brought to the markets in Montreal were carp of the kind known as suckers and very small at that. No more of those nice carp which we used to see in previous years. There are over 1,000 hoop nets in that part of my district besides seines, gill nets and the numberless hooks of night lines.

I interviewed some of the principal fishermen. All are grateful to the government for the regulations made about the length of the fish. In their opinion, this measure should have been adopted for some time, but what is badly needed now, is a regulation concerning the meshes of net which should be, as they say, 1½ inch square and 3 inches

in extension for hoop nets and seines.

The hoop net fishermen throw all the blame on the fish seiners and vice-versa. If I am permitted to express an opinion, I should say that both are fish destroyers, the one as bad as the other, and the same may be said of the gill nets, at least in my district. There is also the minnow net, which is a most destructive implement, as it catches indifferently thousands and thousands of young bass, maskinongé, doré, whitefish, etc., etc. that serve to bait the night lines. It should be prevented. If some measure

could be taken to oblige the sportsmen or other people to use a scoop net and catch only the necessary quantity of minnows, the damage done should be a great deal less.

In the counties of Berthier and Maskinongé no progress can be reported. If some-

thing, the situation is worse than in the other places above mentioned.

In the lakes St Louis, Two Mountains and St. Francis the prospects are more encouraging, principally in lake St. Louis, in the county of Chateauguay and in Beauharnois. It is evidently due to the prohibition of fishing with nets in these different places, to the great satisfaction of the public who also acknowledge the wisdom of the new regulations issued last September. Mr. Hyacinthe Lussier, an old fisherman of Chateauguay Basin who fishes every summer for sturgeon in Lake St. Francis, said to me:—"The law is against me, this time, but I sincerely admit that it is right. I have "been catching sturgeons for 45 years and opened thousands of them; I never found "any eggs in sturgeons three feet long and very few in those of 42 inches in length. Had "this law been adopted 15 to 20 years ago we should have better fish and of better "quality than now. Fishermen who are against this law do not understand their own "interest."

As soon as all kinds of nets shall have been prohibited in lake St. Peter and St. Lawrence river from Quebec to the boundary line, a great change shall be coming and

everybody shall gladly acknowledge it.

Finally I would suggest that fishing should be prohibited in small rivers, brooks or bays which are visited by the fish in the spawning season. I am convinced that should such a measure be taken, the results would be most satisfactory.

Hoping these few remarks shall be favourably accepted.

I am, sir, Your obedient servant,

JOS. RIENDEAU,

Inspector of Fisheries.

# REPORT ON THE INLAND FISHERIES OF QUEBEC FOR THE YEAR 1907, BY INSPECTOR A. H. BELLIVEAU.

Оттаwa, April 29, 1908.

To the Commissioner of Fisheries, Ottawa.

Sir,—I beg to submit my annual report on the fisheries of my district for the

year 1907.

To better establish relative comparisons with those of previous years, the same limits in the inland province of Quebec have been adhered to, even when under different officers.

As stated before, it seems difficult to secure reliable information respecting statistics of fisheries, when the authorities requiring the catch of fish, for publication only,

differ from the provincial officers, who deliver permits to fishermen.

The latter have no special forms for that purpose, and even with the former, it is all a work of estimation furnished by a few of good will. The supplying of proper and correct statistical information, far from large markets, is often a matter of concealment by the producer. Its inaccuracy is also attributed to the negligence of many fishermen, who still fear that by giving high returns of fish captured the season before, their license, although under another government, might be increased in proportion to their capture.

To try an improvement in that line a new way of keeping data for fishing returns will be inaugurated in the principal fishing districts of the inland portion of Quebec. Should it prove a success there, it will be an easy matter to introduce the new system

to other localities.

North Shore: In that part of my district, north of Quebec city, extending to and including the famous Saguenay river, it is reported that much less poaching for salmon was indulged in, than during the previous season. The local fishery officer of Tadoussac (a good man) informs me that he only secured and seized a few illegally set nets for salmon, not the third number of previous years. Salmon did not seem as plentiful as in other seasons, especially around the Saguenay and its tributaries.

Quite a few white whales (belugas) were noticed at the mouth of the Saguenay,

but few were reported captured.

In Lake St. John, from which the Saguenay flows, fish were reported plentifully,

and a large catch returned by the local officer there.

Even with the prohibition of netting in these waters by the provincial authorities, it is claimed that the quantity of nearly all kinds of fish is in excess of that of the previous year. Either former catches were undervalued or the past season was a very good one, even if the prohibition of nets existed. The Indians near Roberval still have the privilege of netting on their reserve.

The Dominion Fishery Officer Catellier, of Tadoussac, is now of opinion that salmon may go to the sea and again ascend the Décharges to the Lake St. John; as specimens that have been captured there would indicate a greater number of years than fry have been planted therein. He is now endeavoring to have this report confirmed by reliable persons.

The South Shore fisheries from the eastern part of the county of Rimouski to Levis show a diminution of about \$50,000, due mostly to its sea production. The cod around Matane districts shows a falling off of over 50 per cent and that of herring salted and fresh a diminution of also about 35 per cent. According to localities, the worst showing comes from the Méchins and Isle Verte districts, each showing a decline of ten thousand dollars.

The Eastern Townships, containing the beautiful lakes of Megantic, Memphremagog, Massawippi, Alymer, St. Francis, Brompton, Brome and others are not sufficiently protected. It is true that a couple of good men are seeking to protect these fisheries by their best efforts, but they remain almost powerless in such a vast area. The best of fishery laws and regulations may ornate the statute books, but if no important means are taken to carry them out, they will produce no good results.

It seems to the undersigned that where provincial authorities issue no fishery licenses, they take little or no interest in the protection of fish in their native elements. It is unfortunate that any indifference at all should be manifested in the protection of fish and game, as it requires the good will of everybody to help in such an ungrateful

and unremunerative assistance.

There are now a few good clubs for the protection of fish in existence in the Townships, and it is to be hoped they will master the situation.

Mississiquoi Bay, mostly the only place where fishing is indulged in winter time, in my division, was again seined in the spring of 1908, that is, at the end of last fiscal year. The fishermen on the Philipsburg side did very poorly, hardly paying expenses, while those of the other side, off Aird and Clarenceville realized as good fishing as ever, and quite up to the fair capture of the previous season. Difficulties were experienced in the shipping of their catch to the American markets and the doors of the Fulton market were closed to them at the request of Americans.

This prohibition was even extended to the eelweirs of Richelieu, in the vicinity of Iberville. However, the proprietors of the latter weirs have opened new markets in Chicago, which proved satisfactory, and it is very doubtfull if these eels would again take the way of New York, even if allowed, as the West is now more profitable and

brings better returns.

Respectfully submitted, A. H. BELLIVEAU,

Inspector of Fisheries.

RETURN showing the Number, Tonnage and Value of Boats, Nets and all Fishing Materials, &c., in the County of Bonaventure, PROVINCE OF QUEBEC-Gulf of St. Lawrence District. Province of Quebec, for the Year 1907.

RESTIGOUCHE SUBDIVISION (Tide Head to Maguasha).

		Number.				12645973	D		HO VII., A.	190
ISH.	1	Herring, fresh lb,		3000		4600 25000 25000 25000 25000 25000 25000	32000			
OF F	.sl	Herring, bristed, bri		20		30000000000000000000000000000000000000	1		2000 2000 3000 3000	_
KINDS OF FISH.	'qsa	Salmon, fre		20000		10000 40000 45000 20000 1500	166500		26000	31500 1000
TER NT.	eries.	Value.	€€			2000	2000		600 700 300	2300
LOBSTER PLANT.	Canneries	Number.		:			.			
	Lines.	Value.	69	:		8885588	2			:
	Hand	Number.		:		04 04 00 00 00 00 00 00 00 00 00 00 00 0		eau).		
SIALS.	Trawls.	Value.	<del>60</del>	:	Point	40	1	Point Macquereau).	800 1000 300 2500 3600	8200
(ATE	T	Number.		:	ebiac		1	nt M	40 50 150 160	415
OR M		Value.	6/0-		Pasp	150			475 600 520 1200 760	3555
Fishing Gear or Materials	Seines.	Fathoms.		:	(Maguasha to Paspebiac Point)	150	650	(Paspebiae Point to	350 425 400 1000 450	2625
HING	02	Number.		:	agua	10 10	25	iac F	123	83
F181	ts.	Value,	€9	2000		2000	7300	Paspeb	1500 1800 750 9000 10000	23050
	Gill Nets.	Fathoms.		2000	SUBDIVISION	2000 2000 1000 2000 4000 600	14600	ION ()	2600 3100 1500 8000 8000	23200
		Number.		25	IBD	100 100 100 100 100 100 100 100 100 100	730	VIS	110 150 450 500	970,1270
ATS.		Men.		50		00 4 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	009	SUBDIVISION	1110 135 60 345 320	970
Fishing Boats.		Value,	€9	450	BONAVENTURE	200 400 500 1200 2250 300	7050	DANIEL S	2400 2600 600 6000 7800	19400
FISH		Number.		22	NAV	22222	300	1 1	80 80 30 210 195	575
	Transford	DISTRICTS.	Bonaventure County.	1 Restigouche Subdiv., Tide Head to Magnasha.	B(	1 Maguasha and Nouvelle 2 Carleton 3 Maria. 4 New Richmond and Black Capes. 5 Capeline 6 Bonaventure. 7 New Carlisle	Totals	PORT	1 Hopetown 2 Nouvelle 3 Shigawake 4 Port Daniel 5 Anse à Gascon	Totals.
		Number.		-		100450000 VOXXCBX	0		HASSA A	

HØ8450 ℃8

Number.

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Bonaventure, Province of Quebec, for the Year 1907.

ha)
ıasl
agu
M
20
ead
H
ide
E
Z
10
IS
ΛI
BD
SU
S
HB
JC
10
TIG
200
RE

						KIN	KINDS OF FISH.	FISH.								
Битрег, Бизтигств,	Herring, smoked, lb.	Lobster, pre- served in cans, lb.	in shell, cwt.	cwt.	sounds, brls, Haddock, fresh, lb.	Haddock, dried, cwt.	Halibut, lb.	Trout, lb,	Smelts, lb.	Hels, brls.	Tom cod or frost fish, lb.	Fish oil, galla.	Fish as bait, brls,	Fish as manure, brls.	Total Value of All Fish.	addmi/
Bonaventure County.  Restigouche Subdiv., Tide Head to Maguasha	•	:	15.	:	2	:		3000	75000	:	30000			1000	\$ cts.	, 00 00
BONAVENTURE	ENTO		3DIV.	SUBDIVISION	(Magu	(Maguasha to Paspebiac Point)	Paspe	biac E	oint).	- · -	- !	- i				
1 Maguasha and Nouvelle 2 Carleton 3 Maria 4 New Richmond and Black Capes 5 Capelin 6 Bonaventure 7 New Carlisle 8 Paspebiac.	6000 100000	720 3840 4800	100 200 00 00 00 00 00 00 00 00 00 00 00	2500 2500 3000 5000 5000 5000	2000 5 1000	75 60 100	009	2000 2000 2000	3000	30 mm		20 20 20 1400 1800 300 2000	20 20 150 150 250 250	1000 1500 4000 7000 8000 750 1000	2,801 8,532 13,612 8,787 18,217 25,215 4,280 15,730	88888888
Totals	12100	9360	75	9460	0009 6	235	009	1900	8000	15.		5605	845	21950	97,174	00
PORT DAN	DANIEL S	SUBDIVISION (Paspebiac Point to Point Macquereau).	OISI	N (Pas)	pebiac	Point t	o Poin	Mac	luerea	u).						
1. Hopetown. 2. Nouvelle. 3. Shigawake. 4. Port Daniel. 5. Anse à Gascon.	3000 3500 2000 8000 1000	15408 18240 16512 3072	* * * * * * * * * * * * * * * * * * * *	1400 1 1900 1 650 1 5500 2	16	200 150 300 300	2000 2900 2500 3000 500 3000 3500 3000		150000		. : : : :	1000 1400 375 2400 3600	300 400 1000 2000	1000 1200 2000 1700 1200	14,132 12,300 10,424 31,203 34,071	900000
Totals	17500	53232	:	13050 4	188	1000	11500'8000		18000	<u> </u>	1 :	8775	3800	6400	102,132	13

RETURN showing the Number and Value of Vessels and Boats, Nets, &c., in the County of Gaspé, in the Province of Quebec, for the Year 1907.

GRAND RIVER SUBDIVISION (Point Macquereau to Barachois.)

FER TT.	ries.	Value.	<del>90</del>	700 11000 1000 1000 700 6	4400
LOBSTER PLANT.	Canneries.	Number.		0 <b>0</b> 0	6.
	ines.	Value.	<b>%</b>	600 400 300 150 40	1517
Annual Law and Control of Control	Hand Lines.	Number.		1200 175 800 600 300 80	3155
		Value.	<del>69</del>	200 200 1720 650	3180
ERIALS	Trawls.	Number.		25 20 20 47 47	221
FISHING GEAR OR MATERIALS.		Value.	€€	120 120 120 120 450	920
FEAR O	Seines.	Esthoms.		70 150 200 120 60 150	750
SHING (	02	Number		अकार करा क	21
Fig		Value.	<b>⊕</b>	3680 900 3400 3330 1660 400	13370
	Gill Nets.	Fathoms.		6800 1800 6800 5660 2000 840	24900
	Gi	Number.		368 90 340 100 120 120	1270
ATS.		Меп.		391 83 320 270 130	1224
FISHING BOATS.	Boats.	.9ulaV	6€	4180 1100 6000 5500 4000 700	21480
Fishi		Number.		150 100 121 141	487
	Dispricts.		Gaspé County.	I Newport 2 Pabos 3 Grand River 4 Cape Cove Forest and Banaventure Island 6 Comer of Beach.	Totals

GASPÉ BAY SUBDIVISION (Barachois to Fame Point.)

Down or an arrangement of the second of the	_	9.	9550	94	227	1305	1218	6	450	360			253	101		
Daraciiolis		4 0.5	3660	108	108	1620	1512	10	200	400			324	130		500
Paint St Deter			1260	30	25	375	350	ତୀ	100	80	:		72	29	:	:
Chien Blanc to Sandy Beach		152	9120	283	281	4215	3934	15.	750	009	:	:	828	331	ಣ	1100
Gasné North and South			300		9	96	84	:	:	:	:		200		: :	
Dening and Little (Jashé			3120	85	<del>2</del>	1200	1120	10	250	200		:	240	96:	 :	
Chande (Indue to Shire Head		, ,	2640	09	09	006	840	ಾ	150	120	:		153	62	· :	
Cana des Bosiers to Jersey Cove		_	6480	201	201	3015	2814	Ť	200	160	:	:	615	246	=	250
Heart Cove		-	4140	131	131	1965	3234	_	25	40	:		393	157	:	
10 Fox Biver			7380	235	235	3525	3290	9	300	240		:	705	282	:	
11 Little Cane to Rehourse			2440	92	92	1140	1036	:		:		:	228	91	:	
12 Point Jaune to Fame Point.			4020	116	116	1740	1624	:		:	:	:	345	138	:	
Totals	7	784 4	0804	1423	1406	21090	21056	55	2725	2200		:	4174	1670	5	1850

50

250,082

10777

28172

63527

42253

23664

64949

Totals....

RETURN showing the kinds and quantities of Fish and Fish Products in the County of Gaspe, in the Province of Quebec, for the year 1907.

GRAND RIVER SUBDIVISION (Point Macquereau to Barachois.)

	Total Total Fish.	& cts.	33,342 60 1 15,637 60 2 56,453 80 3 43,005 00 4	94	183,567 45		14,496 60 1 25,646 70 2 25,646 70 2 25,648 10 3 4,638 10 4 213 10 6 11,4213 10 6 11,430 35 7 7 3 3,775 30 10 8 34,767 30 11 15,997 40 112
	Fish as bait, brls.		1000	350	5850		378 1137 283 2180 78 78 78 1468 1392 1375 1575 533
	Fish oil, galls.		2620 750 4500	2220	14220		1815 2739 627 5103 156 1152 1521 3645 2911 4276 1694
	Smelts, lb.		7000 10000 7000	2000	26000		59015
	Halibut, lb.		1000 2000 500	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	3500		
	Haddock, dried, cwt.		9289	:	180	Point.	
Fish.	Cod, dried, cwt.		5240 1500 9000 7000	4500	28440	to Fam	2723 4109 940 940 7650 234 2418 2282 5467 4366 6414 2541 3109
KINDS OF FISH.	Lobsters, pre- served in cans, lb.		17232 13392 13536	4800	81264	SUBDIVISION (Barachois to Fame Point.	9360
1	Mackerel, fresh,		009	0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	009	SION (I	
	Herring, salted, brls.		200 10 1378 250	001	1958	JBDIVI	23 93 873 93 873 168 176 168 169 169 259
	Salmon, fresh, lb.		5180 21800 6000	14313	47295	BAY SI	2500 950 18370 29462 12640 1027
	Number.	Guspé County.	1. Newport 2. Pabos 3. Grand River 4. Cane Cove	5 Pereé and Bonaventure 6 Corner of Beach	Totals	GASPÉ	1 Barachois. 2 Maibaic. 2 Maibaic. 3 Point St. Peter. 4 Chien Blanc to Sandy Beach. 5 Gaspe North and South. 6 Pennsula and Little Gaspe. 7 Grande Grève to Ship Head. 8 Gape des Rosiers to Jersey Cove. 10 For River. 11 Little Cape to Echourie.

8-9 EDWARD VII., A. 1909

RETURN showing the Number, Value of Boats, Nets, &c., in the County of Gaspé, in the Province of Quebec, for the Year 1907. MONT ST. LOUIS SUBDIVISION (Fame Point to Claude River).

11_		APP 300000000000000000000000000000000000	Number.		H2004700F-00	
- 1000		LOF	SH.	cts.	888888888	50
		TOTAL VALUE OF	ALL FISH	- 60	4,570 11,965 16,015 11,095 16,190 3,697 9,027 15,107 8,910	96,577
		' 'ann	Fish as man		1200 220 200 100 100 100 100 100 100 100	370
			Tish as daiT		150 150 150 150 150 150 150 150 150 150	4025
	ii	.sll	Fish oil, gal		800 1600 1800 1200 2000 600 650 650	10700 4025
	of Fish.		Halibut, lb.		500 3000 14000 24000 22000 2000 3000 11800 4000	82500
1	KINDS OF	pur s	Cod, tongue sounds, br		111 110 110 110 110 110 110 110 110 110	31
	Kin		Cod, dried,		850 2200 2700 1600 2500 500 1460 2075 1225	15110
		ted,	Herring, sal		200 100 100 150 150 350	1750
		'qı 'qs	Salmon, free		1000 1000 2000 7000 4600	18100 1750
	RIALS.	Lines.	Value.	€€	68 168 232 220 344 164 164 380 380	2180
	MATE	Hand	Number.		34 84 116 110 1188 82 124 1190 178	1106
	FISHING GEAR OR MATERIALS	ts.	Value,	<b>69</b>	700 1800 2500 1700 2806 1450 1450 5200 2600	19750
	TING G	Gill Nets.	Fathoms.		1200 3000 3600 3000 5100 2100 2850 6400 8750	31000
			Number.		100 100 100 170 70 125 125 125	0901
	ATS.		Men.		89 89 89 89 89 89	573 1060
	FISHING BOATS.		Value,	60	450 1200 1600 650 2200 600 750 800	11100
	Fish		Number.		10 22 33 33 64 42 64 64 64 64 64 64 64 64 64 64 64 64 64	359
		DISTRICTS.		Gaspé County.	1 Grand Etang. 2.St. Yvon. 3.St. Yvon. 3.St. Prop. 3.St. Prop. 4. Petre Anse to Frigate Point. 5. Grande and Little Vallée. 6. Alagdalen River. 7. Manche d'Epée and Gros Mâle. 8. Anse Pleurense and Mont Louis. 9. Rivière à Pierre and Claude.	Totals
			Number.		— 24 to 0 f − 00 to	}

SESSIONAL PAPER No. 22

RETURN showing the Number, Value of Boats, Nets, &c., in the County of Gaspé, in the Province of Quebec, for the year 1907. STE. ANNE DE MONTS SUBDIVISION (Claude River to Cape Chatte).

Districts.	FISH	ING B	OATS.	Fish	IING GEAR	AR AND	FISHING BOATS, FISHING GEAR AND MATERIALS.	LALS.			KINDS OF FISH.	Fish.	'sII	sjag '	Total
	Number.	·salue.	:n9M	Number.	Fathonis.	Value,	Number,	Value.	Salmon, fre	Herring, sa brls.	, beirb , boO	di ,tudilaH	Fish oil, ga	tisd as daiT	ALL FISH.
Gaspé County,		€				<del></del>		60							es cts.
1 Marsonis and Martin River. 2 Cap au Renard and Anse à Jean. 3 Ste. Anne's. 4 Cape Chatte	83 4 0 tc	26 47 1466 658	126	138 41 41 138 141	180 3601 1033	45 56 1987 592	10 252 104	10 252 104	1000	42 1559	15 100 1534 724 1	600 5215 5215 5680	12 55 1250 510	4 14 260 147	258 60 736 50 16,159 00 8,226 00
Totals	131	2197	185	101	4910	2680	370	370	370 17960 1927	Ì	9875 9	91505.	1097	495	0 000 XG

RETURN showing the Number, Tounage and Value of Vessels, Boats, Nets, &c., in the County of Gaspé, Province of Quebec, for the Year 1907.

-	
potent	
£	
1	
-	
-	
7/0	
1	
7	
~	
_	
hami	
$-\sigma D$	
1	
-	
-	
20	
10000	
han	
$\rightarrow$	
do	
92	
$\tau D$	
~	
$\rightarrow$	
-	
Z	
7	
-	
70	
J	
00	
hope	
$\sim$	
F 7	
=	
-	
- 1	
-40	
-	
-	
75	
1	
-	
2	

E.	les.	Value,	<b>€</b>	75 9700 12500	22275
LOBSTER PLANT.	Canneries.	onlo V		12 12 12 12	)
in in		Number.			17
	lines.	Value,	<b>60</b>	30 225 560	815
	Hand-lines,	Zumber,		70 1000 1500	2570
	Trawls.	Value.	(P)	375	875
zά	Tra	Number.		35	85
FISHING GEAR OR MATERIALS.	Trap Nets.	Value.	<b>%</b>	7800	7800
R MA	Irap	Number.		13:	13
FEAR O		Value.	<b>6/9</b>	3260	6620
SHING (	Seines.	Fathoms.		2500 1850	4350
H	,   -	Number.		101	20
		Value.	€€	1200 9800 6000	17000
	Gill Nets.	Fathoms.		3000 5000 12000	20000
	5	Number.		150 300 600	1050
χô		Men.		24 375 728	1127
FISHING VESSELS AND BOATS.	Boats	Value.	<del>69</del>	300 5000 2775	8075
S AN	,	Number.		140 271	422
SSEL		Men.		21	21
ING VE	Vessels.	Value.	<b>⊕</b>	2000	2000
Fish	Ve	Tonnage.		92	76
		Zumber.		, XG	10
	DISTRICTS.		Gaspé County.	1 Entry Island 2 Amherst Island 3 Grindstone Island	Totals

MAGDALEN ISLANDS SUBDIVISION—NORTH.

6200	26000			35700
7	29	60		40
09	100	40	10	210
300	0000	200	40	1040
:	:		:	
	:	:	:	1 2
<u>:</u>	<u>:</u>	:		18
3500	8000		:	11500
1,0	20	:	:	27
:		300	:	. 300
:	:	250	:	250
•	•		:	-
4000	1000	120	08	5200
0009	3000	400	300	0026
200	100	15	10	325
300	200	09	20	580
3250	2300	1000	400	6950
65	130	30	10	235
10	:	:	:	10
1000	:	-	:	1000
300	:	:	:	800
67		:	:	2
		:		
All Right Island	2 Grand Entry Island	Bryon Island		
ind	Island.		:	
Right Isla	nd Entry	on Island	5 Wolf Island	Totals.

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Gaspé, Province of Quebec, for the Year 1907.

# MAGDALEN ISLANDS SUBDIVISION—SOUTH.

	Number.	}	0700	
	TOTAL VALUE OF ALL FISH.	& cts.	5,422 50 142,402 20 144,227 50	292,052 20
	Seal skins, No.		6550	19550
	Fish as manure, brls.		200	1400
	Fish as bait, brls.	,.	55 12570 5882	18507
	Fish oil, galls.		25 19260 40600	59885
	Eels, bris.		40	72
	Halibut, lb.		1500	0006
FISH.	Haddock, dried, cwt.			
Kinds of Fish.	Cod, tongues and sounds, brls.		15	15
KIN	Cod, dried, ewt.		35 2887 3520	6442
	Lobsters, preserved in cans, lb.		113544	7190 263509
	Mackerel, salted, brls.		318 3987 2885	
	Mackerel, fresh, lb.		15600	50000 15600
	Herring, smoked, lb.		50000	
	Herring, fresh, lb,		5000	25000
	Herring, salted, brls.		06	06
	DISTRICTS,	Gaspé County,	1   Intry Island 2 Amberst Island 3 Grindstone Island	Totals
	Number.		40133	

# MAGDALEN ISLANDS SUBDIVISION—NORTH.

90,762 00	117,620 00	174 00	4,665 25	221 25
	d-med			240,221
1200	009	300	35	2135
200	200	:		1000
15000	12000	1240	300	28540
3600	1900	086	105	6585
:	:	;	:	
	:		* * * * * * * * * * * * * * * * * * * *	:
	200	:	:	200
	:			
009	1000	150	20	1770
2000 100000	0000 150200	62400	12000	5380 324600
2000	3000	350	30	5380
5600	2000	:		10600
00000	:		:	00000
6000-1	4000	;	•	100001
:	200		:	200
:			:	:
:	:			
	:			
All Right Island	2 Grand Entry Island	Bryon Island	5 Wolf Island	
land	z Islan			Totals
wht Is	Entry	Island	Island	Tots
II Ri	rand	ryon	/olf	

8-9 EDWARD VII., A. 1909

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., in the County of Saguenay, Province of Quebec,

	0.
	0
	0
	0
	m
	Ø
	=
	- 5
	್ಷ
	-
	-
	20
	+
	62
	- 3
	C2
2	76
	200
	92
	-
Ζĺ	-
	5
	0
5	1
>	CO
	Card .
•	= -
ł	
	7
	1
	1-1
	0
3	
•	
2	200
	I
	-
	DIVISIO
	6 3
	Scottered.
	$\sim$
	J.B.
	L
	5
	James
	20
	12
	LO
	-
	h
	5
	-
	-
	0
	00
	_
	-
	OI
	-
	75
	_

	FI	SHING	FISHING VESSELS AND BOATS.	ELS A	ND B	OATS.				Fish	NG G	EAR	I GNA	FISHING GEAR AND MATERIALS.	MALS.		-		
Dremprone		Vessels,	20		Bo	Boats.		E.	Gill-nets.		Se ei.	Seines.	<u></u>	Trawls.		Weirs.	Hand- Lines.	d-	
Number	Number.	Tonnage.	Value,	Men.	Number.	Value.	Men.	Number.	Kathoms.	Value.	Number,	Fathoms.	Number.	Value.	Number.	Value.	Number.	Value,	Number.
Saguenay County.			66			<b>6</b> 0				G)		90	₩	<b>€</b>		60		89	
1 Colombiers to Bersimis. 2 Pointe aux Outardes to Godbout. 3 Pointe de Monts to Jambons.	7000	19 34 25	450 625 375	70.00	13	260 620 2460	31 52 102	19 47 131	1048 2300 6100	1048 2300 6100		225 2 200 2	200	2 ÷ 60 4 2 × 0	: n	150	10 210 235	105 117	200
Totals	L-	78	1450	× ×	167	3340	185	197	9448	9448	1	425 4	400	6 340	4	200	455	227	
MO	MOISIE	SUBI	SUBDIVISION	NOIS		(Jambons	to Pi	Pigou).		-						_			1 1
1 St. Margaret's. 2 Seven Islands. 3 Moisie 4 Pigou.		250	12000	100	. 25g · .	1300	12 59 54	. 34 : :	958 1895 3258	900 1450 3000	<u>⊢</u> നന:	60 125 2 185 2	250 250 250				120 110 110	0.00 :	₩ c3 cc 44
Totals	-	250 1	12000	10	29	2900	125	52	6111	5350	1	370 5	505	1:		:	250	125	
MINGAN		UBD	SUBDIVISION	ON,	(Pigou to		St. Ch	Charles)		-			-						f
River aux Graines and Chaloupe   Sheldrake   Thunder River   Dock to Jupitagan   Magpie   Sh. John's River   Tong Point, Mingan and Romaine   Esquimaux Point to St. Charles	: : : : : : : : :				95.50 95.50	1300 11200 3360 910 2560 2700 6900	51 121 27 107 183	800 10 10 40	240 180 180 240 600 600 300	150 150 150 150 150 160 160	04x010040	105 140 240 240 6 70 175 175 380 6	225 240 600 150 375 240 616				153 114 363 81 82 321 222 222 549	90 68 1135 1135 127 329	H0100 410 0 1-00
Totals	:	:	:	:	296	22450	676	57	2335	1955	100	1360 2896	:	;		:	2028	1206	
													_!	-					

O.	
Unepec, ior	
Province of	
by of Saguenay, 1	
ne County or	
and Fish Products in th	Vear 1907.
Fish F	the
howing the kinds and quantities of Fish and	D
RETTIEN S	

	Number.		-0.00	[	-	1004	40	-	H284703F8
	Total Value of all Fish,	& cts.	3,558 85 4,884 05 16,638 80	25,081 70		3,307 25 80,704 30 37,218 10 440 75	121,670 4		11,669 00 11,232 50 24,247 00 3,861 05 19,890 00 20,790 00 12,172 50 19,966 50
	Porpoises, No.			22				-	
	Seal skins, No.		307 59 264	630		39 239 158 53	489		20 10 15 20 20 20 310 445
	Fish as manure,		45.	85		3000	09		
	Fish as bait, brls.		36	215		25 195 130 12	362	-	300 300 750 500 600 600 600 600
	Fish oil, galls.		177 921 892	1990		231390 347 40	231957		1260 600 2300 350 1500 1100 2800
	Coarse and mixed fish, bris.		15.0	74					
	Whale, No.			1:		22	77	· S	
b.	Sardines, brls.		14	1 14	gou).		. 12	Charles	
Fish	Eels, brls.		- 00	0 1	to Pi	: : : :	1:	St.	
KINDS OF	Smelts, lb.		0 2500 0 2500 0	00 3450	(Jambons to Pigou)	93 :00	50	2	
KIN	Trout, lb.		3230 1900 2 38245 3700	41475 6800		2150 450 10139 12800 700 2140	27229 1150	(Pigou	1960 6900 12550 1000 60 900 50 2950 100 51 51 51 51 51 50 50 50 50 50 50 50 50 50 50 50 50 50
	Halibut, lb.				ION		1	ION	125 125 125 125 125 125 175 175
	Cod, tongues and sounds, bris.			4 6	IVIS	25 25 30 30 30 30 30 30 30 30 30 30 30 30 30	8 10	IVIS	2340 2500 2500 2500 2500 2500 2500 2500 25
	Cod, dried, cwt.		154	1224	SUBDIVISION	312 832 749 25	1918	SUBDIVISION	004 00000
	Lobsters, preserv'd in cans, lb.		1824	1824			1:	1	2450
	Herring, fresh, lb.	-	::::	1:	MOISIE	320 2400 320 2400	342 2400	MINGAN	92
	Herring, salted,		15 203 2 250	22 480		328	. 34	M	
	Salmon, salted,			1		03150			600 1000 1000 7100 3700 1000 1000 1000 10
	Salmon, fresh, lb.	0	18000 13000 32500	63500	-	5240 29061 213240	251541		600 5400 1000 7100 7000 13700
	Number.  Districts.	Carineman County	1 Colombiers to Bersimis. 2 Pointe ans Outsides to Godbout. 3 Pointe des Monts to Jambons	Totals		1 St. Margarets. 2 Seven Islands Moiste	Totals		River aux Graines and Chaloupe. Sheldrake 3 Thander River. 5 Magne 6 St. John's River. 7 Long Point, Mingan and Romaine. 8 Esquimaux Point to St. Charles.

8-9 EDWARD VII., A. 1909

RETURN showing the Number and Value of Vessels and Boats, Nets, &c., in the County of Saguenay, Province of Quebec, for the Year 1907.

NATASHQUAN SUBDIVISION (St. Charles to Natashquan Point).

		Number.	1	H 62 35 44 70			1 -0100-	4	1	- H00047001	
	-ue	Persons, em ployed in canneries,		10	19			23		16	18
ANT.		Value.	69	375	200		200	750		900000000000000000000000000000000000000	360
LOBSTER PLANT.	Traps.	Number.		375	200		2000	006		0001	[009
Lobs	Canneries.	Value.	66	525	1025		500	650		200	250
	Cann	Numbér.		67 . 63	4		H :,400	10	-	· 44 · · · ·	120
	Lines.	Value.	60	12 120 40 40 220	392		10 10 15	35		150 100 100 300 300	515
. ()		Number.		24 240 80 80 480	824		24 20	74	-	390 246 480 325 120	1991
itals.	Trap Nets. Hand	Value,	09			Whittle).	200	450	ica).	3000 2200 2000 3600 2000 2000	11500
ATE	Trap	Number.			1:		::	62	Chicatica).	122668:	35
L. Charles to Dadashiquan Fond. Fishing Gear or Materials.		.enlaV	<del>\$9</del>	90 270 180 720	1260	to Cape	. 50 50 50 50	150	40	200 200 200 200 200 200	1850
GEA	Seines.	Fathoms.		50 200 100 400	750	Point	34 : 44	135	Whittle	250 250 250 200 200 100	008
HING		Number.		H :400	15		ਜ :ਜਜ	100		1000044	36 1800
Fis		Value,	<i>9</i> €	220 100 300 600	1220	Natashquan	116 100 132	448	V (Cape	250 700 800 750 900 1000	5000
	Gill Nets.	Fathoms.		220 1110 320 	1250		250 300 300 300	1125	TSIO	500 1200 800 1000 2000 1000	7.00
	75	Number.		: 	15	71SIO	10 5 9 11	35	SUBDIVISION	10 10 10 10 10	†6
SSELS IS.		Men.		12 00 120 120	213	SUBDIVISION	10 10 13	36		112 60 115 110 110	460
FISHING VESSELS AND BOATS,	Boats.	$\Lambda$ slue.	<b>6₽</b>	650 125 2500 800 5000	9075	田	725 75 390 750	1940	AUGUSTIN	200 1600 750 1500 1400 700 3 0	6450
FISH		Number.		25.04	80	ROMAIN	9000	27	ST. AU	8 4 4 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9	312
	DISTRICTS.	Number.	Saguenay County.	1 Prashtre Bay 2 Watsheeshoo and Pashashiboo 3 Agwamish and Nabisippi 4 Mission Island 5 Natashquan	Totals		1 Kegashka 2 Washeecootai 3 Romaine 4 Cocoachoo	Totals		1 Etamamu and St. Mary's 2 Harrington 3 Litche Meccatina and Whale Head 4 Mutton Bay Tabatière 5 Meccatina to Tabatière 6 Fonderie à Fecteau to St. Angustin 7 Point à Giroux to Chicatica.	Totals

Quebec,	
of	
Province	
Saguenay,	
of	
County	d.
the	inne
i.	'ont
Products	1907-0
Fish Pro	Year
and	for the
Fish	for
of	
Quantities	
s and	
Kinds	
the	
showing	
RETURN	

	ALL	Number.	700	040 050 750 050 750 050 150 150 150 150 150 150 150 150 1	65		080 2009 600 4	000		1284597
	Toral Value of A Fish.		ets.	959 (1,107 4, 1,552 1,954 (1,954 (15,257 7,557 )	25,830 (		3,874 8 337 2 1,605 9 2,097 6	7,915		865 11,446 9,948 12,436 5,565 5,157 5,157
	.oV	Seal skins,		2288805	186					. 250 250 250 250 250 250
67	tise.	Fish as b		20 400 1000	1520		100	150		500 500 350 600 170 130 60
	.sll.	Fish oil, ga	,	275 24 800 200 1600	2899		200	290		175 1075 1750 1600 2700 1000 210
		Eels, brls.			00		: : : :			: : : : : : : : : : : : : : : : : : : :
		Smelts, lb.		400	500 1000					
Fish.		Trout, lb.		200	,		: : : :	1:	ica).	3000
OF		Halibut, lb		1000 400	1800	Whittle	1200	1200	Chicatica)	
Kinds	es or	Cod, tongue		10 :01	20			1:	to C	
×	1	Cod, dried, ewt.		50 1000 320 2000	3370	o Cape	500	678	hittle	2000 1500 2300 700 500 100
	ui	Lobsters, 1 s e r v e d cans, 1b.		480	3264	Point to	816 624 768 4512	6720	(Cape Whittle	2000 4780
		Herring, salted, br		20 52	172			210		165 42 118
	fnag	Salmon, salt		19 17 66 66 135	237	rshqu	10	35	SIO	30 10 10 120 120
		Salmon, fre		9435	9435	(Natashquan	5400	6400	SUBDIVISION	
USED	and ris.	Value.	<del></del>	450	1150	SUBDIVISION	200	325	1 1	500 500 600 750 
RES	Piers an wharfs.	Number.	-	10: 12:	25	DIV	4 .000	6	ITS	100000
	Smoke and I	Value.	<b>6</b>	300 40 400 400 4000	6240	1	200	425	AUGUSTIN	2000 2000 750 100
OTHER	moke sh-hc	Number.		910104	29	AINI	·	12	ST.	
	Dremprome	DISTRICTS	Saguenay County.	Piashtre Bay   Pashashiboo   Salah Bay   Pashashiboo   Alashashiba   A	Totals.	ROMAINE	1 Kegashka 2 Washeevotai. 3 Romaine. 4 Cocoachoo.	Totals		1 Etamamu and St. Mary's. 2 Harrington. 3 Little Meccatina and Whale Head. 4 Mutton Bay. 5 Meccatina and Tabatière. 6 Fonderie à Fecteau to St. Augustin. 7 Point à Giroux to Chicatica.

REUURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., and the Quantity of Fish and Fish Products in the County of Saguenay, Province of Quebec, for the Year 1907.

Sablons
Blance
2
(Chicatica
_
UBDIVISION
S
ANCE
ESPER
BONNE

11		Number.		H0004706F-00		ſ	H01004		
	wlb.	Value.	%	60 40 120 200 200	420				
	Trawls.	Number.		15 30 40	95				
	nets.	Value,	<b>₩</b>	3100 80000. 12000. 1200 4900 4000.	46700	-	800 400	1200	
FISHING GEAR OR MATERIALS.	Trap nets.	Number.		28 28 28 11 3 28 8 14 14 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	120		4 :01 :	9	
OR MA		Value.	<b>%</b>	330 950 1200 200 850 75	4205				
GEAR	Seines.	Fathoms.		160 450 520 80 80 375 50 220	1855			:	
ISHING		Number.		44620 .70 -10	31				
	70	Value,	<b>⊕</b>	335 50 100 100 50 50	1260		250 400 350 100	1100	
	Gill-nets.	Fathoms.		550 200 1250 200 100	2300		400 800 640 200	2040	
		Number.		2002944	46	OSTI.	10 20 16 6	52	
		Men.		50 152 12 12 110 110 80	619	NTIC	335	69	
ATS.	Boats.	Value.	<b>6</b> 9	1905 3250 4000 600 2300 1200 2000	18255	ISLAND OF ANTICOSTI	350 510 600 50	1510	
AND BC		Zumber.		049 827 128 129 60 60 60 60 60 60 60 60 60 60 60 60 60	370	LAND	35 11 12 3	19	
SSELS			Men.		20	61	THE IS		
FISHING VESSELS AND BOATS.	sels.	Value.	66	4500 2000 10000	16500	TE			
Fish	Vessels.	Tonnage.		90	1384				
		Number.			7				
	DISTRICTS.	Number.	Saguenay County,	1 Chicatica to Burnt Island 2 Bonne Esperance. 2 Bridgeon Island to Salmon Bay. 4 Little Rishery and Five League. 5 Middle Bay and Belles Amours. 6 Bradore 7 Long Point 8 Green Island.	Totals		1 Fox Bay. 2 Baie Ste. Claire 3 Strawberry Cove. 4 Shallop Creek.	Totals.	

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of Saguenay, Province of Quebec, for the Year 1907.

[]		Number.		H004700F0				
	TOTAL VALUE OF	ALL T LOIL	e cts.	13,893 50 33,750 00 32,770 00 4,830 00 13,800 00 31,032 50 26,841 50	182,447 50		14,193 80 1,332 50 1,796 00 45 00	17,367 30
	l .oV	Seal skins,		52000	350		* ^ / .	
	, brls.	tisd as dai't		300 300 300 100 100 100 100	1350		700 75 100	875
Trs.	.sl	Fish oil, gal		3270 5000 4300 600 1750 4000 4000	28420		120	220
DAGO		Eels, brls.					61	67
Kinds of Fish and Fish Products.		Trout, lb.		400	1200			:
I AND E		Halibut, lb.					2000	3700
OF FISH	ewt,	Cod, dried,		2730 1000 1000 2900 5500 5500	37830		300	516
ZIND8 C	eserved o.	Lobsters, pr				I.	43056	43056
	fed,	Herring, sa brls,			22	OST	88 :	40
	ed, brls.	disa, nomisa		100000000000000000000000000000000000000	29	ANTICOSTI	ණ · ∙ ණ	9
	di ,ds	Salmon, fre					009	009
LOBSTER PLANT.	Canneries.	Value.	<del>\$6</del>			THE ISLAND OF	16000	16000
L PJ	Can	Number.		* * * * * * * * * * * * * * * * * * *		ISL	- : : :	1
OR	Smelt nets. Hand Lines.	Value.	<b>∜</b> ₽	132 130 130 150 80 80 80 150	712	THE	10 15 15	40
SHING GEAR MATERIALS.	Hand	Number.		224 . 240 . 396 48 . 324 . 200 . 120 . 300	1852		80 m m	08
FISHING GEAR OR MATERIALS.	lt nets.	Value.	<b>69</b>	470 250 610 800 420 2000 2000	6550			:
	Sme	Number.		22 66 12 75 75 75 75	174			:
	Districts.	. Number,	Saguenay County.	1 Chicatica to Burnt Island 2 Bonne Esperance 3 Pidgeon Island to Salmon Bay 4 Little Fishery and Five League 5 Middle Bay and Belles Amours 6 Budore 7 Long Point.	Totals		1 Fox Bay	Totals

## RECAPITULATION

SHOWING the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials in Gulf Division Province of Quebec, for the Year 1907.

### BONAVENTURE COUNTY.

		Number.		-010	
	esp' Ip.	Маскетеј, fi			
H.	moked,	Herring, a		12100	29600
OF FIS	'qı 'qsə	Herring, fre		3000	35000
KINDS OF FISH.	alted,	Herring, a		2130 1000	3180
-	lted or	Salmon, sa smoked, l		::::	1 :
		Salmon, fre		70000 66500 31500	1560 268000
	Lin's	Value,	60	300 1	Į.
	Hand	ләдши N		600	3130
ALS.	Trap Nets Hand Lin's	Value.	<b>00</b>		:
TERI	Trap	Number.		: : :	1 :
or Ma		Value.	€€	750	4305
EAR (	Seines.	Fathoms.		650	3275
de G	92	Number.		22.08	114
FISHING GEAR OR MATERIALS.	ts.	.ənlæV	66	5000 7300 23050	35350
	Gill Nets.	Fathoms.		5000 14600 23200	42800
		Number.		25 730 270	3025
		Men.		50 600 970	1620
HING VESSELS AND BOATS	Boats.	Value.	<b>∜</b> ∌	450 7050 19400	26900 1620 2025
AND		Number.		300	268
SELS		Меп,		• • •	:
ve Ves	essels.	Value,	€€		
Fізніі	Ve	Tonnage.		: : :	:
F4		Number.			:
	Subdivisions.	Number		Restigouche Bonaventure Port Daniel	Totals

### GASPÉ COUNTY.

		ಣ	4		9	
009			.:	15600	10600	0 26800
	:	:		50000	00000	20000
:	:			5000	10000 100000	35000 150000
958	3402	750	927	90 2	500 1	9627 3
	G-0				•	1 :
95	49	00	09	:	1	1 :-
	64646				:	1483
					210	6822
3155	4174	1106	370	2570	1040	40 19300 12415 6822 148304
				7800	11500	19300
	:	:	:	13	27	1
920	2200	:	:	6620	300 27 11500	0+001
21 750	2725	:	:	4350	1 250	97 8075 10040
21	55	:	:	20		- 26
13370	99017	19750	2680	17000	5200	31 2418 96882 5112 5302 111600 79056
24900	21090	31000	4910	20000	9700	11600
270	406	090	191	020	325	3021
1224	14231	573	185	1127 1	580	5112
21480	47080	11100	2197	8075	6950 580 325	28896
487			131	422	235	2418
:	:	:		21		i
:			•	2000		3000
:	:	*	:	92	300	114
:	:	:	:	20	2	1
Grand River	Gaspé Bay.	Mont Louis	ste Anne de Monts	Magdalen Islands, South	" North	Totals

8-9 EDWARD VII., A. 1909

1	-	07	ಣ	4	10	9	<u>_</u>	00	
		:	:				:	:	
	:	:	:	:	:	:	:	:	
	:	2400		:	:	325	<u>·</u> :	:	2400
	480	342	. 92	172	210	200	22	40	1667
-	22		-	237	35	200	29	9	292
	63500								366276
	227	125	1206	392	35	515	712	40	3252
-	455	250	2028	824	74	1991	1852	08	7224
	:		650	:	450	11500	120 46700	1200	165 60500
1	:								1
	400	505	2896	1260	150	1850	4205		3695 11266
						_	1855		6699
	1~	L-	40	15	ಣ	36	31	:	139
	9448	5350	1955	1220	448	2000	1260	1100	25781
	9448	_					•	• •	32109
							46		548
								69	2383
			64				18255		65920
			296	80	27	312		61	89 1372
		10	:	:	:	:	19	:	
	1450	_	:				16500		29950
	78	250	•	:	:	:	1384	:	1712
	1-		:	:	:	:	1	:	15
	1 Godbout	2 Moisie.	3 Mingan.	4 Natashquan	5 Romaine	6 St. Augustin.	7 Bonne Esperance	8 Anticosti	Totals

SAGUENAY COUNTY.

1	H 67 39	1
	3180 35000 29600 9627 35000 150000 26800 1667 2400	26800
	29600	009621
	35000 35000 2400	72400
	3180 9627 1667	14474
	567	267
	7 114 3000 31 2418 96822 5112 5302 111600 79056 97 8075 1040 40 19300 12415 6822 148304 9627 35000 15000 5 1712 29950 89 1372 65920 2383 548 32109 25781 139 6695 11266 165 60500 7224 3252 366276 567 1667 2400	1826 32950 120 4687 189702 9115 7875 136509 140187 350 18045 25611 205 79800 22769 11634 782580 567 14474 72400 179600 26800
	1560 6822 3252	11634
	3130 12415 7224	22769
	19300	00862
N	40 165	205
VISIO	4305 10040 11266	25611
C DI	3275 8075 6695	18045
*ULJ	114 97 139	350
OF.	35350 79056 25781	140187
GRAND TOTAL OF GULF DIVISION	42800 111600 32109	196509
	2025 5302 548	7875
KAL	1620 5112 2383	9115
5	26900 96882 65920	189702
	897 2418 1372	1687
	:60	12
	300	3295
	1114	1826
	- H	22
	Bonaventure County Gaspé County.	Grand totals
	1000	

### 8-9 EDWARD VII., A. 1909

Showing the Kinds and Quantities of Fish and Fish Products in the Gulf Division, Province of Quebec, for the Year 1907—Concluded.

## BONAVENTURE COUNTY.

 Number.			
TOTAL VALUE OF ALL FISH.	& cts.	16,280 00 97,174 00 102,132 10	215,586 10
 White porpoises.			1 :
Seal skins, No.			
Fish as manure,		1000 21950 6400	29350
Fish as bait, brls.		 845 3800	4645
Fish oil, brls.		5605	14380
Coarse and mixed fish, lb.			
Whales, No.		: : :	1
Tom cod or frost fish, lb.		30000	30000
Sardines, brls.			
Hels, brls.		45	45
Smelts, lb.		75000 8000 18000	00010
Trout, lb.		3000 4900 8000	12100 15900 101000
Halibut, lb.			12100
Haddock, dried, cwt.		235	1235
Haddock, fresh, lb.			0009
Cod, tongues and sounds, bris,		48	57
Cod, dried, cwt.		9460	22510
Lobsters, fresh in shell, cwt.		75	66
Lobsters, preserved in cans, 1b.		9360	62592
Mackerel, salted, brls.			
SUBDIVISIONS,		RestigoucheBonaventurePort Daniel.	Totals

### GASPÉ COUNTY.

Grand River         S1264         28440         180         3500         2600         14220         5850         183,567         45           Gaspé Bay         23664         42253         82500         63327         1070         4025         370         250,082         50           Mont Louis         Ste, Ame de Monts         2373         21505         2250         25,062         20         370         96,577         50           Magdalen Islands, South         7190         293550         6442         15         200         72         15885         1400         19550         290,522         29           Magdalen Islands, South         7100         29368         1770         1400         19550         292,052         29           Magdalen Islands, South         72         89585         72         1400         19550         292,052         29           Magdalen Islands, South         72         89585         28540         1000         2135         294,221         25           Totals         12570         69388         46         380         116505         89527         72         72         121389         68124         2770         21685         1,087,881         10 </th
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
81264         28440         180         3500         25000         14220         5850           mts         23664         42253         1510         31         82500         10700         4025         370           mts         1510         2873         21505         9000         72         127         4025         370           North         5380         324600         1770         200         6685         28540         1400           12570         693037         46         380         116505         89527         72         121889         68124         2770
81264         28440         180         3500         25000         14220         5850           mts         23664         42253         1510         31         82500         10700         4025         370           mts         1510         2873         21505         9000         72         127         4025         370           North         5380         324600         1770         200         6685         28540         1400           12570         693037         46         380         116505         89527         72         121889         68124         2770
R1264         28440         180         3500         26000         26000         5850           mts         23664         42263         15110         31         82500         10700         4025           mts         7190         263509         2373         15         21505         10700         4025           North         5380         324600         1770         200         6442         15         200         6585         1857           North         5380         324600         1770         6588         46         380         116505         72         121389         68124
R1264         28440         180         3500         26000         26000         5850           mts         23664         42263         15110         31         82500         10700         4025           mts         7190         263509         2373         15         21505         10700         4025           North         5380         324600         1770         200         6442         15         200         6585         1857           North         5380         324600         1770         6588         46         380         116505         72         121389         68124
nts. North. 5380 324600 1770 693087 96388 46 380 116505 89527 72
nts. North. 5380 324600 1770 693087 96388 46 380 116505 89527 72
nts. North. 5380 32460 12570 693037 96388 46 380 116505 28500
nts. North. 5380 32460 12570 693037 96388 46 380 116505 28500
nts. North. 5380 32460 12570 693037 96388 46 380 116505 28500
nts. North. 5380 32460 12570 693037 96388 46 380 116505 28500
nts. North. 5380 32460 1770 12570 698037 96388 46 380 116505 8
nts. North. 5380 32460 1770 2000 17570 698087 96388 46 380 116505 8
nts. North. 5380 324600 12570 693037 96388 46 380 1
nts. North. 5380 324600 12570 693037 96388 46 380 1
North. 5380 324600 1770 12570 693037 96388 46
North. 5380 32460 1770 12570 693037 96388
North. 5380 32460 1770 12570 693037 96388
81264 23664 nnts North 7190 283509 North 5380 324600 12570 693037
nts. S. South. 7190 2 North. 5380 3
nuts. North. 7190 2 North. 5380 3
onts. S, South North.
River Bay.  Jouis.  ne de Monts.  en Islands, South.  " North.

15

2 1,853,767

25260

32265

82797

74 421965

12

30000

128 26

36 ....

Grand totals

12570 819723

### SESSIONAL PAPER No. 22

-	H01004700F0	[	1	07 00
-	300 220 300 220 300 300	05		9861
	081 670 828 828 915 915 447 367	300		586 881 300
	25,0 21,6 21,6 25,8 25,8 46,1 17,3	550,300		215,8 087,8 550,3
				1,00
	67 : : : : : : : : : : :	2		
	630 489 445 186 186 350	3575		3575
1	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;			
	88 90 90 90 90 90 90 90 90 90 90 90 90 90	145		29350 2770 145
	211 362 3700 1520 150 1860 1350 875	10028		4645 68124 10028
-	1990 231957 111910 2899 290 8610 28420 220	74 286196		14380 121389 286196
-	4 : : : : : : : : : : : : : : : : : : :	742		742
	:22	7.7		
				::
			DIVISION	30000
	112	26	VIS	26
T.X.		=	DI	45 72 11
COUN	3450	4450	GULF	89527 4450
NAX	6800 1150 2600 500 500 1200	15250	FOR	15900
SAGUENAY COUNTY	41475 27229 43760 1800 1200 3700	119164	TOTAL FOR	12100 116505 119164
Z			D T	380
	::::::::		GRAND	
			GR	57 6000 46
	20 10	36		57 46 36
ļ [	1224 1918 22937 3370 675 7150 37830 516	75620		22510 96388 75620
		<u> </u>		06 : :
	4 :02.08 :30	94		92
	1824 2450 3264 6720 6780 43056	64094		62592 0,693037 64094
				1257
		:		: : :
				. ::
	1ce.			Youn nty.
	n n	Cotals		nty Cour
	Godbout. Moisie Mingan. Natashquan. Romaine. St. Augustin Bonne Esperance.	Lota		Bonaventure County
	dbor isie ngar tash mair Au			nave spé ruen
	Godbout Moisie Mingan Natashquan Romane St. Augustin Bonne Esperance Anticosti			Bonaventure County Saguenay County
	402400Fx			-0100

8-9 EDWARD VII., A. 1909

### RECAPITULATION

Statement showing Yield and Value of Fisheries in Gulf Division, Province of Quebec, for the Season of 1907-8.

Salmon, fresh, in ice         Lb.           " salted         Brls           Herring, " " "         "           " fresh         Lb.           " smoked         "           " salted         Brls           Lobsters, canned,         Lb.           " fresh, whole         Cwt           Cod, salt-dried         "           Cod tongues and sounds, salted         Brls           Haddock, fresh         Lb.           " salt-dried         Cwt           Halibut, fresh         Lb.           Trout, "         "	567 14,474 72,400 179,600 26,800 12,570 819,723 90 194,518 139 6,000	\$ cts.  0 15 15 00 4 50 0 01 0 02 0 12 15 00 0 30 5 00 4 50 10 00 0 03	\$ cts 117,387 0 8,505 0 65,133 0 724 0 3,592 0 3,216 0 188,550 0 245,916 9 450 0 875,331 0 1,390 0 180 00
Smelt,       "         Eels, salted       Brls.         Sardines, salted       "         Tommy col, fresh       Lb.         Coarsed and mixed fish, salted       Brls.         Fish, whale and seal oil       Gall.	$\begin{array}{c} 247,769 \\ 31,150 \\ 194,977 \\ 128 \\ 26 \\ 30,000 \\ 74 \\ 421,965 \end{array}$	3 00 0 10 0 10 0 05 10 00 3 00 0 03 2 00 0 30	4,845 00 24,776 90 3,115 00 9,748 83 1,280 00 78 00 900 00 148 00 126,589 50
Fish as fertilizer       "         Fish as fertilizer       "         Seal skins       No.         White whale skins       "         Vhales       "	82,797 32,265 25,260 2 77	1 50 0 50 1 25 4 00	124,195 5 16,132 5 31,575 0 8 0
Total value, 1907			1,853,767 18 1,980,727 20

### RECAPITULATION

Showing Number of Men, Vessels, Boats and Value of Material employed in Gulf Division Fisheries, Province of Quebec, for Season of 1907-8.

	\$ ets
22 vessels of 1826 tons, manned by 120 men	32,950 0
4.686 boats, fished by 9,115 men	189,702
6,509 fathoms of gill net	140,187
8,045 fathoms of seine	25,611
205 trap-nets for herring and cod	79,800 (
580 trawls	13,355 ( 200 (
4 weirs	9,500
2.769 hand lines and leads	11.634
100 lobster canneries, employing 1,672 persons	85,600
8.390 lobster traps	81,980
95 freezers and ice-houses	22,890
621 smoke and fish-houses and fish-weirs	187,595
230 private piers, wharfs and landing stages	72,200
8 tugs and smacks	20,950

## PROVINCE OF QUEBEC—Continued.

RETURN Showing the Number of Boats, Nets, &c. in the South Shore District from Rimouski County to Levis inclusive, Province of Quebec, for the Year 1907.

	,		8-9 EDWARD VII., A. 1909	
ī	Number.	1	00000000000000000000000000000000000000	
	Cod, fresh, lb.		8 8700 77500 77500 77000 6000 6000 6000 600	
	Cod, green, lb.			
	Cod, dried, cwt.		2145°C0	
.dI ,t	Herring, smoked		3000 3000 3500 25000 152400	
.d.	Herring, fresh, l		2000 3700 3700 3000 4000 22000 22000 7600 7600 7600 10000 100700 1884100 26000 152400 1884100 26000 26	
brls.	Herring, salted,		2855 2865 2866 2866 2866 2866 3866 487 487 487 487 487 487 487 487 487 487	
'q	STRECTS			
eirs.	Value.	<b>6</b> €	220888827.77.1.17.80088887.17.1.17.17.17.17.17.17.17.17.17.17.17.	
	Number.		1	
	Value.	€€	20 : : : : : : : : : : : : : : : : : : :	
FISHING MATERIALS.	sines	Fathoms.		
υŽ	Number.			
70	Value,	7 66	155 125 125 125 125 125 125 125 125 125	
Net	Kathoms.		300 100 100 100 100 100 100 100 100 100	
Gill	Number.		3.5. 1. 3.5. 1. 3.5. 1. 3.5. 3.5. 3.5. 3	
			8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
oats.	Value,	<b>€</b>	100 100 100 100 100 100 100 100 100 100	
Ã			410 812 82 82 82 82 82 82 82 82 82 82 82 82 82	
Distribution			1 'Japucins. 2 Petit and Grand Mechins 3 Grosses Roches 5 Matane 6 Rivier Blanche. 7 Sandy Bay. 8 Metis and vionity 9 Ste. Flavie and Ste. Luce 10 Rimousti and Inland Lakes 11 Bic, St. Fabien and St. Simon 12 Trois Pistoles. 13 Bic, St. Fabien and St. Simon 14 Cacoma. 15 Lake Temiscounta and tributaries 16 Bix, du Loup and N. D. du Portage 17 St. André 18 Kamouvaska. 18 Kamouvaska. 19 Kat. Onelle. 20 Rivière Ouelle. 21 Ste. Anne de la Pocatière 22 Ste. Roch and St. Jeanse. 23 L'Islet and Cap St. Ignace. 24 Crane and Goose Islands.	
	Boats. Gill Nets. Seines. Weirs.	Number.  Number.  Number.  Number.  Number.  Number.  Number.  Number.  Number.  Number.  Number.  Number.  Number.  Number.  Number.  Number.  Number.  Nalue.  Number.  Nalue.  Nalu	Men.    Number.   Alme.   Alme.     Mumber.   Alme.     Walne.   Walne.     lne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.     Walne.   Walne.   Walne.   Walne.     Walne.   Walne.   Walne.   Walne.     Walne.   Walne.   Walne.   Walne.     Walne.   Walne.   Walne.   Walne.   Walne.     Walne.   Walne.   Walne.   Walne.   Walne.   Walne.     Walne.   Walne.   Walne.   Walne.   Walne.   Walne.   Walne.	

RETURN showing the Number of Boats, Nets, &c., in the South Shore District from Rimouski County to Levis inclusive, Province of Quebec, for the Year 1907—Continued. PROVINCE OF QUEBEC-Continued.

		Number.		23 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
		Cod, fresh, lb.			57400	1148
DUCTS		Cod, green, lb.			90 301400	450 12056
н Кво		Cod, dried, cwt.			908	
d Fisi	di ,t	Herring, smcke		* * * * * * * * * * * * * * * * * * * *	12440	8248
Kinds of Fish and Fish Rroducts.	·dl	Herring, fresh,	,		1344000 412440	13440
O SGNI	brls.	Herring, salted,			2924	13158
×	•0	Salmon, fresh, ll		90 1120 1160 270 820 270	22710	3406
	irs.	Value.	SF2	1670 4500 800 3770 7500 5500	48880	
	Weirs.	Number.		- 61 - 61 - 61 - 61 - 61 - 61 - 61 - 61	305	
		Value.	<b>6</b> €		165	
ALS.	Seines,	Esthoms.			215	1:
FISHING MATERIALS.		Number.			1 00	:
G MA	rgs.	Value.	₩.	17.0	1330	
SHIN	Boats. Gill Nets.	Fathoms.		225	370 7590 4330	!
FI		Number.		# : : : : : : : : : : : : : : : : : : :	1	:
		Men.		800 21 4 K B B B B B B B B B B B B B B B B B B	716	:
		Value.	æ	20 650 1130 120 120 110	7106	:
		Vumber.		20020	448	
	į	DISTRICTS,		25 St Thomas 26 Berthier 27 St. Valler 28 St. Mitchel 29 Beaumont 30 St. Joseph and Levis. 31 St. Romuald and New Liverpool	Totals	Values
	-	Number.		23.25 E. S.		

# PROVINCE OF QUEBEC—Continued.

RETURN showing the Kinds and Quantities of Fish and Fish Products, from the County of Rimouski to Levis, Province of Quebec, for the Year 1907.

		8-9 EDWARD VII., A. 1909
	Number.	
	E.	2
	VALUE	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	Beluga skins, No.	
	Seal skins, No.	
	Fish as manure, brls.	112 20 20 20 20 20 20 20 20 20 20 20 20 20
	Fish as bait, brls.	2152348821
	Fish oil, galls.	100 150 150 150 150 150 160 160 170 170 170 170 170 170 170 170 170 17
70	Coarse and mixed fish,	116800 22000 1200000
DUCES	Clams, bris.	32.50
PROI	Sardines, brls.	1358 300 21 21 21
KINDS OF FISH AND FISH PRODUCTS.	Eels, 1b.	6000 6000 1280 14750 5150 5150 7400 4850
H ANJ	Pickerel, lb.	
Fisi	Bass, lb.	000
S OF	Smelts, lb.	2500 5500 6500 7500 7500
Kini	Shad, lb.	(10 5700 580 580 580 580 580 580 580 580 580 5
	Trout, lb.	\$500 \$350 \$350 \$350 \$350 \$350 \$350 \$350
	Halibut, lb.	1000 1000 1000 800 2000 1000 4004 5000 2000 2000 2000 2000
	Whitefish, lb.	999
	Sturgeon, lb.	2500 2500 2500 2500 2500 2500
	Districts.	Capucins   Capucins   Service and Grand Mechins   Service Roches   Ste. Felicité   Matane   Experience   Sandy Bay   Sandy Bay   Sandy Bay   She Flavie and Ste. Luce   Sandy Sandy Ste. Luce   Ste. Flavie and Ste. Luce   Ste. Flavie and Ste. Luce   Ste. Flavie and Ste. Luce   Ste. Ste. Fabien and St. Simon   Since Pistoles   Ste. Fabien and St. Simon   Since Pistoles   St. Fabien and St. Simon   Since Pistoles   St. Fabien and tributaries   St. André   St. André   St. André   St. André   St. André   St. André   St. Lech and St. Jean Port Joli   St. Ame   St. Jean Port Joli   St. Late and Goose Islands   St. Irslet and Goose Islands   St. Irslet and Goose Islands   St. Irslet and Goose Islands   St. Irslet and Goose Islands   St. Irslet and Goose Islands   St. Irslet and Goose Islands   St. Irslet and Goose Islands   St. Irslet and Goose Islands   St. Irslet and Goose Islands   St. Irslet and Goose Islands   St. Irslet and Goose Islands   St. Irslet and Goose Islands   St. Irslet and Goose   St.
11	Number.	222222222222222222222222222222222222222

# PROVINCE OF QUEBEC-Continued

RETURN showing the Kinds and Quantities of Fish and Fish Products, from the County of Rimouski to Levis, Province of Quebec, for the Year 1907—Continued.

SESSIONAL PAPER No. 22

	Number.	8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	:	
	VALUE	\$ cts. 1,494 10 2,920 00 1,870 50 2,026 20 4,1026 50 3,785 50 2,266 00 1,722 00		84 365 80
	Beluga skins, No.		4	19
	Seal skins, No.		24	30
	Fish as manure, bris.		3187	469 1593
	Fish as bait, brls.		308 3187	
	Fish oil, galls.		1111	333
ź.	Coarse and mixed fish,	68000 60000 62400 5800 6500	443700 1111	4437
DUCT	Olams, bris.		165	3330
Pre	Sardines, brls.		909	518
Kinds of Pish and Pish Products.	Eels, ib.	3350 27300 21000 27630 47300 55400 3900 12300	10760 7350 7200 5350 246800	1.1808 1815
= AN	Pickerel, Ib.	520 660 660 600 430 990 180 180	5350	535
= = = = = = = = = = = = = = = = = = =	Bases, lb.	270 2000 85 1075 1030 500 120 600	7200	7.00
0 80	Smelts, lb.		7350	36.7
KIN	Shad, Ib.	10 500 1260 1970 1800		6.16
	Trout, lb.	000	21100	9110
	Halibut, lb.		25500	1275
	Whitefish, 1b.	100 2000 3200 430 1340 650 100 1600	1.1020	1402
	Sturgeon, lb	8500 3300 2800 980 600 800	26310	1578
	Districtis,	25 St. Thomas 26 Berthier 27 St. Valier 28 St. Michel 29 Beaumont 30 St. Joseph and Levis 31 St. Romaald and New Liverpool	Totals	Values

8-9 EDWARD VII., A. 1909

### Return of the Number of Fishermen, Boats, Nets, &c., and the Quantities Province of Quebec,

		FISHING MATERIAL.										
Districts.		Boats		Gill Nets.			Seines.			Hoo		
	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Shad, 1b.
North side of the St. Lawrence.		\$				\$			\$		\$	
Ottawa River and tributaries, inclu- ing Pontiac and Ottawa Counties. Lake Two Mountains. Lacques Cartier and Hochelaga. Lerrebonne and l'Assomption Berthier and vicinity. Lit. Maurice, Champlain and Portneu  South Side of St. Lawrence.	$egin{array}{c c} & 63 \\ 100 \\ 70 \\ & 75 \\ & 50 \\ & 50 \\ \end{array}$	1100 700 750 380 370	65 100 70 75 50 50 85	79 40 30 35 20 25 50	1,500 400 300 350 200 250 500	60 40 35 25 25	4	120		240	200 370  1250 1200 150	10
Actionière and Nicolet Counties  Tamaska County and River.  Tichelieu County  Tichelieu River, (St. Denis to Lacoll Fercheres County  Laprairie County  Laprairie County  Lake St. Louis and tributaries  Lissisquoi Bay  Lakes and Streams Eastern Tps  Totals	62 50 50 48 30 25 110 70 13	600 300 500 240 300 250 1100 700 250	65 50 50 48 30 25 110	5 5 6	100 100 90 ling a	25 12  15	10 1 2  13 troll	200 40  80  1200 ing	80 80 600 only	1200 47 120 20 	7300 235 600 100	50 8 30 40

<sup>\*</sup>In No. 7 add 96,000 lbs. tom. cods, \$2,880.

SESSIONAL PAPER No. 22

of Fish caught in the Inland District from Quebec City to Pontiac, for the Year 1907.

Kinds of Fish.													
Whitefish, 1b.	Trout, lb.	Bass, 1b.	Pickerel, lb.	Pike, lb.	Maskinonge, lb.	Sturgeon, lb.	Eels, 1b.	Perch, lb.	Bullhead, lb.	Cattish, 1b.	Mixed and coarse fish, 1b.	VALUE.	Number.
												\$ ets	
5000 700 200 750	46300 1600 30000 1500	9500 1700 500 1000 300 300 1000	18500 4500 1500 1200 1000 500 2000	45300 5000 1100 1500 2000 3000 2000	1200 500 120 200 150	14300 1200 600 1200 400 300 1500	9200 6500 1800 2100 2200 2500 4000	9400 6000 1500 1600 2500 2000 3000	8000 2000 1200 2000 3000 2600 2000	8100 3200 1200 600 900 1100 2500	98000 6000 1100 2200 18000 15000 3000	14,798 0 2,158 0 619 0 3,835 0 1,263 0 971 0 4,500 0	0 0 0 0 0 0
500 100 300 400 300  1900 5300	15600	1000 900 250 6000 300 500 1000 16600 3000	3200 3000 1200 3500 500 400 500 2000 2500 17700 9100	6100 13000 1200 30000 900 1000 600 1700 1500 4200 7200	200 450 250 150 150 200 450 600	2000 1500 1700 200 1000 500 400 2100 3000	11000 15000 2000 90000 1200 1000 4500 60000	2000 5000 5000 40000 1000 1200 6000 7000 3000 33900 11600	3000 3000 2000 35600 1000 700 900 4000 1500 3500 2400	2500 1600 900 400 500 900 1700 2500	30000 76000 8100 133500 4000 10500 2000 1500 1200 26000 12400	2,650 0 4,043 0 1,051 0 14,312 0 499 0 635 0 766 0 3,017 0 4,789 0 4,562 0 5,123 0	00 :00 :00 :00 :00 :00 :00 :00 :00 :00
15450	97000	49450	72800	127300	4920	31900	217000	141700	78400	31100	448600		
1545	9700	4945	7280	6365	492	1914	13020	7085	3920	933	8972	69,591	00

8-9 EDWARD VII., A. 1909

STATEMENT of the North Shore Gulf of St. Lawrence from Quebec to the Saguenay, including Lake St. John District, 1907.

Fishing Materials and Kinds of Fish.	Counties of Quebec and Mont- morency, with Island of Orleans.	Charlevoix including Isle aux Coudres.	Lake St. Johns with Tributaries, including Saguenay River.	Total Quantity.	Total Value.
Materials.					\$
Boats    No.      Weirs    "      Gill nets    Fathoms.      Lines    No.	12 120 350 50	15 45 320 40	10 300 100	38 165 970 190	222 12,375 194 190
Total value		• • • • • • • • • • • • • • • • • • • •			12,981
Kinds of Fish.					12,001
Salmon. Lb. Frout. Whitefish Duananiche " Herring " Pickerel Pike " Gels " Perch Sardings "	1,000 7,200 1,800 600	3,000 10,000 6,400	27,000 20,500 9,300 42,000 53,600 52,500	31,000 37,700 11,100 42,000 6,400 54,200 52,500 266,000 1,100	4,650 3,770 1,110 4,200 64 5,420 2,625 15,960
Sardines Brls. Mixed fish Lb. Beluga skins No.	20,200	$94,000 \\ 14$	17,000	100 131,200 50	300 $1,312$ $200$
Total lbs. fish	272,800	156,800	226,600	658,200	
Total values	15,292	4,790	19,584		39,666

### RECAPITULATION

Showing the Yield and Value of the Fisheries of the Province of Quebec, (exclusive of the Gulf Division), for the Year 1907.

Kinds of Fish.	Quantity.	Price.	Value.
Cod, green and fresh  Halibut, fresh Salmon Ouananiche  Trout Whitefish Herring, salted "fresh "smoked "smoked "smoked "Lb "Sardines Brls. Shad Lb Eels "Maskinongé Bass (sea) "(achigan) Pickerel (doré) Pike Perch Sturgeon Ton-cod Smelts Bull-heads, dressed Catfish Coarse and mixed fish Clams Fish as bait "as fertilizer "oil Hair seal skins Beluga (white whales) skins  Total Value for 1907  Togare and in the coarse and mixed fish Decrease	308 3,187 1,111 24 54		\$ cts.  13,654 00 1,275 00 8,056 50 4,200 00 15,580 00 4,057 00 13,158 00 13,158 00 13,158 00 13,158 00 1,185 60 43,788 00 720 00 7,140 00 3,492 60 2,880 00 367 50 3,920 00 933 00 14,721 00 330 00 14,721 00 330 00 15,93 50 333 30 216 00 193,622 80 244,308 50

### RECAPITULATION

Showing the Fishing Materials in the above Districts, 1907 (exclusive of the Gulf Division).

Articles.	Value.
	\$
,500 fishing boats (2,000 men) ,806 fishing gill nets (12,850 fathoms) ,245 fathoms of seines. 471 fish weirs (brush or wire) 2 large weirs (special for eels). ,056 hoop nets. night lines and hand lines 40 fish-houses or ice-houses.	16,4 5,4 1,4 61,2 60,0 11,6 1,6 1,4 9
Total	160,1

8-9 EDWARD VII., A. 1909

### RECAPITULATION

Showing the Yield and Value of the Fisheries in the whole Province of Quebec, for the Year 1907.

Kind of Fish.	Quantity.	Price.	Value.
		\$ cts	s. \$ ct
Salmon, fresh Lb.	836,290	0 15	125,443
" salted Brls.	567	15 00	8,505 0
Ouananiche Lb.	42,000	0 10	4,200 0
Trout	186,950	0 10	18,695 0
Whitensh	40,570	0 10	4,057 0
Smelts	202,327	0 05	10,116 3
Cod, dried Cwt. Green Lb.	194,518	4 50	875,331 0
	367,800	70.00	13,654 0
Haddock, dried Cwt.	$139 \\ 1,615$	10 00	1,390 0
" fresh	6,000	3 00 0 03	4,845 0
Halibut	273,269	0 05	180 9 26,051 0
lom cod	126,000	0 01	3,780 0
terring, fresh	1,422,800	0 01	14,228 8
" smoked "	592,040	0 02	11,840 0
salted Brls.	17,398	4 50	78,291 0
Sardines	731	3 00	2,193 0
ShadLb.	16,460		1,185 6
Mackerel, fresh	26,800	0 12	3,216 0
Bulloca, Rrig'	12,570	15 00	188,550 0
Bass, sea. Lb. " (achigan). "	7,200	0 10	720 0
ickerel	49,450	0 10	4,945 0
Perch.	132,350	0 10	13,235 0
ike	$142,800 \\ 179,800$	0 05	7,140 0
laskinongė	4,920	0 10	$\begin{bmatrix} 8,990 & 0 \\ 492 & 0 \end{bmatrix}$
ers, iresn	729,800	0 06	43,788 0
" salted Rrls	128	10 00	1,280 0
turgeon	58,210	0 06	3,492 6
obsters, canned	819,723	0 30	245,916 9
Shen	90	5 00	540 0
lams Brls.	. 165	2 00	330 0
ull heads, dressed Lb.	78,400	0 05	3,920 0
	31,100	0 03	933 0
	1,013,500		14,721 0
ish as bait.	74	2 00	148 00
ish as fertilizer	$83,105 \\ 35,452$	$\begin{bmatrix} 1 & 50 \\ 0 & 50 \end{bmatrix}$	124,657 50
ish oil	423,076	0 30	$17,726 \ 00$ $126,922 \ 80$
air seal skins	25,284	1 25	31,605 00
Thite whale skins	56	4 00	224 00
Total for 1907			2,047,389 95
" 1906			2,175,035 76

### RECAPITULATION

Of the Capital invested in Vessels, Boats, Nets, &c., in the Fisheries of all Quebec, for the Year 1907.

Articles.	Value.	Total.
	\$ cts.	\$ ets.
22 fishing vessels, (1,826 tons, 120 men)	32,950 206,130	239,080
209,359 gill nets, fathoms. 20,290 fathoms of seines 205 trap nets. 580 trawls 477 weirs, brush and wire 217 smelt and seal nets. 2,056 hoop nets 22,769 hand lines, night lines, &c.	145,598 27,056 79,800 13,355 121,455 9,500 11,685 13,246	421,695
100 lobster canneries, &c	85,600 81,980	167.580
135 freezers and ice-houses. 621 smoke and fish-houses. 230 private fishing piers and wharfs 8 fishing tugs and smacks 900 fish boxes.	24,315 187,595 72,200 20,950 900	305,960
Total		1,134,31

STATEMENT of the persons engaged in the Quebec Fisheries, 1907.

Number of men in fishing vessels	$   \begin{array}{c}     120 \\     11,115 \\     1,672   \end{array} $
Total	12,907

### APPENDIX No. 7.

### ONTARIO.

### GENERAL REMARKS.

In the province of Ontario, the fisheries yield is valued according to the provincial, the local government report, (from which the following statistics are extracted) at nearly two million dollars, showing an increase of a quarter of million of dollars over the production of last year.

The Great Lakes have produced the following values in their fisheries:-

Lakes.	1907.	1906.	Increase.	Decrease.
Superior Huron and Georgian Bay Erie Ontario	\$ 240,704 673,000 592,629 175,258	\$ 241,847 739,231 437,901 145,469	154,728	\$ 1,143 66,231 25,789

A glance at the above table indicates that while Lake Erie shows a considerable increase, Lakes Huron and Ontario have decreased, and Lake Superior produced nearly the same as last year.

In Lake Erie, the improvement is specially noticed in whitefish, pickerel and pike, which have yielded considerably in excess of 1906.

The fisheries of Georgian bay are included in the above statement in those of Lake Huron, which shows the largest decline of all the great lakes.

The following remarks upon Georgian bay fisheries, may prove interesting being reprinted from the report of the Georgian Bay Fishery Commission.

### GENERAL DESCRIPTION OF GEORGIAN BAY AND CONTIGUOUS WATERS.

The fisheries of Georgian bay and the north channel are, in many respects, the most valua le tre-h water fishing grounds in the world. They are so for two main reasons; the physical and biological conditions which they provide are precisely those most favourable to fish life, especially certain species of prime value for commercial and food purposes, while they possess the advantage of being exclusively within the Canadian territory, and not liable to injury and contrariety in regulations resulting from divided international jurisdiction and control. With the exception of Lake Superior, the vast area thus opened to the operations of Canadian fishermen exclusively, and restricted by law to exploitation by British subjects under the fishery regulations of Canada, is larger than any other inland fishing area in the Dominion, being more than twice the area of the Canadian portion of Lake Ontario, almost exactly twice the extent of the Lake Erie fishing grounds, and more than one thousand square miles vaster than the part of Lake Huron which lies within

British territorial boundaries. Lake Winnipeg, in the province of Manitoba, it may be added, approaches the area of the Georgian bay waters, but its fishing grounds, particularly the whitefish grounds, are very much more restricted, as the southern half is a pickerel and coarse fish resort, rather than the habitat of the superior kinds. The great lake trout which constitutes one-third of the annual catch in Georgian bay waters, is absent from Lake Winnipeg: whereas, that valuable fish and the lake whitefish abound in these western Ontario fishing grounds dealt with in this report.

The area of the Canadian waters in the Great Lakes may be estimated as follows: Lake Ontario, less than 4,000 square miles; Lake Erie, about 5,000 square miles; Lake Huron, 11,000 square miles; whereas Georgian bay and the north channel exceed 12,000 square miles in extent. From Collingwood, at the northern end of the bay, to the outlet of St. Mary's river the distance is 225 miles, and the greatest width is 54 miles. The fact that, in the Great Lakes and other contiguous waters, Canada shares the fisheries with the United States; and that fully one-half of the area of these waters is within the bounds of the republic to the south.

It is entirely different with the Georgian bay fisheries, for they are wholly within Canadian limits and under Dominion laws and regulations, and no such disadvantage affects them as affects the Great Lake fisheries. Moreover, the conditions vary on the United States' side of these waters, because each of the bordering states has adopted a separate and often conflicting policy. At the western extremity of the north channel, the international boundary, it is true, passes between Cockburn island and Drummond islands, and skirts the southern and western margin of St. Joseph island, passing up the narrow channel by Sault Ste. Marie rapids to Lake Superior. But the fisheries of chief importance are not contiguous to the territorial boundary, and the protection, as well as exploitation, of these fishery resources is solely under the control of Canada.

No waters could be more favourable for the best species of fish. The esteemed black bass finds here ample feeding grounds and nesting resorts along the shelving shores and in the numberless bays of the west shore. This romantic coast, with its hundred thousand or more islands, has given it a reputation as a game fish region not to be surpassed. The southern and western parts of the bay have long been regarded as remarkable lake trout or salmon trout grounds; while the northern and northwestern portions, including the wide extent of open water east of the north channel entrance, are, undoubtedly, now the chief resorts for the great schools of whitefish. To these farreaching waters must be added the prolific waters abounding in pickerel, with some trout and whitefish, from Kilarney to little Current and Sault Ste. Marie. In the deeper parts, summer whitefish fishing is carried on at an average depth of twenty-five fathoms by means of gill nets, while, later in the season, in July and August, operations are conducted nearer shore, and the nets may be set in seven to ten fathoms or less. Of course the large lake trout are scattered generally all over the waters here referred to, just as the whitefish occur in most localities, but the main fisheries may be geographically distinguished as stated above. Pickerel (yellow pickerel or wall-eyed pike) are of great commercial importance, and abound in moderate depths generally, while sturgeon, yellow perch, lake herring, speckled trout, maskinonge, catfish, &c., are also generally distributed, some being of moment for the markets, while others are principally of sporting value; but there are few portions of these waters along the shores of the Georgian bay where the species named may not be taken.

No words can exaggerate the former plenitude of fish in the past, and the great, if declining, fisheries at the present time testify to the extraordinary productiveness of the Georgian bay in spite of excessive and wasteful fishing in former years, and the enormous amount of gear which, the evidence showed, is still set in these waters. The records demonstrate that the catch of whitefish in all the Great Lakes did not, in 1890, equal the yield of Georgian bay, viz., 2.912 tons, or, if the Manitoulin island fishing be included, as is usually done, the total catch amounted to no less than 5,296 tons.

### KINDS OF NETS AND GEAR USED IN GEORGIAN BAY.

Gill nets.—There have been at least five different kinds of nets used in the Georgian bay and north channel waters, the earliest of which was the gill net, which, in former days was made by the Indians of cedar withes woven together like one side of a coarse basket. The mesh was six or seven inches across, and it was only necessary to use a few yards of net by each Indian to catch his fish supply during the spawning season when the fish came into shallow water and were easily accessible. When the white man came upon the scene, cotton and linen gill nets took the place of the bark, and operations, up to the early sixties, were conducted by the gill-net. This net consisted of a wall of net about six feet high and of varying lengths. Along the upper margin passed the cork line, upon which floats of cedar, and at later time of cork, were fixed at intervals of nine feet. Along the lower margin passed the lead line, which was weighted with pieces of lead, also at intervals of nine feet. Nets are fastenel together and fished in lengths called gangs, and at each extremity of a gang is a brail, which consists of a perpendicular stick five or six feet long attached to an anchor stone from which the buoy line extends to the surface of the water and is there fastened to the buoy or float. Each gang has, two buoys, one at each end, the buoy consisting of a pole eight or nine feet long fastened through a wooden bowl which is weighted at the bottom end to keep it upright and with the staff four or five feet above. At the upper end of the staff is the flag, so that location of the gill net can be determined, as the net is sunk to the bottom of the lake at depths varying from five to seventy fathoms according to where the fishermen locate the fish. The principal fish caught with the gill net are the whitefish and trout. The gill net fishery in Georgian bay began about the year 1834. It was prosecuted from canoes and small boats. Stones were used for sinkers and pieces of cedar for floats. The nets were lifted every morning. In those days most of the catch was whitefish, and was nearly all salted, the traders dealing in the fish supplying the fishermen with salt and barrels. The first official report made by the Canadian Department of Marine and Fisheries was issued in 1868, and by that report it appears that there were 451 men engaged in the fishery, with 144,750 fathoms of gill net. The catch amounted to 1,184,386 pounds of whitefish, 707,400 pounds of trout, and 7,800 pounds of pickerel. Gill nets were practically the only nets used down to 1881, although two American fishermen came over to St. Joseph island in 1858 and fished two pound nets and caught immense quantities of fish. Between 1870 and 1875 tugs were introduced into the gill net fishery, and their number increased, until 32 were employed in 1894. About the year 1890 the steam lifter was introduced, which facilitated the fisherman greatly in lifting his net, and enabled him to use more and larger gangs than he had done up to that time.

A gang of gill nets at the present day consists of from 18 to 20 boxes of nets with three pieces, weighing 9 pounds to the box. These pieces are about 125 fathoms long, or 375 fathoms to the box. A gang of nets ordinarly, therefore, nowadays consists

of 7,500 fathoms of net, or about 9 miles.

Pound nets.—Of the pound net, it may be said that it consists of an inclosure of net called the pot, or crib, with a number of devices or arrangements for leading the fish into this inclosure, being always set off shore. First there is a wall of net called the leader, which is attached to a row of wooden poles erected at intervals of about five rods. This leader extends from the shore and runs an average distance of 30 rods straight out to the hearts, this being the name given to the second portion of the net. It has two openings by which the fish, passing along the leader, enter, and, having entered the hearts, they find their way by a conical passage called the tunnel into the final part or crib. The mesh in the leader is of large size—7 inches extension measure. The heart and tunnel are of smaller mesh, 5 inches extension measure, while the walls of the pot are (three sides and bottom) 4 inches extension measure, and the back or outer side 3 inches extension measure. Formerly, a much smaller mesh was used in the back, as also in the sides and bottom. This net is supposed to be lifted every day. The fisherman comes to the net, and passing inside of it with a small boat, lifts up the

tunnel first, and then proceeds to raise the entire crib until the fish are all congregated at the back, which process is called 'shoaling up.' The fish are then dipped out of the back in a scoop net, and deposited in the boat. Pound nets were first introduced into the north channel and Georgian bay about 1883, although Americans, as stated, fished pound nets around St. Joseph island as far back as 1858.

Hoop nets or fyke nets.—The hoop or fyke net is almost identical in principle with the pound net, except that, instead, of a crib, it consists of a series of hoops arranged one behind the other, a funnel of net diminishing in diameter until the final compartment or pot is reached where the fish are congregated, and the end of the net is then undone and the fish dumped into the boat like potatoes out of a bag. The outer hoop, or entrance, is of the largest diameter, and leaders and wings, which are walls of net arranged perpendicularly, lead the fish into this entrance. This net is set in very shallow water.

Trap nets.—A trap net, which, although illegal, is still used extensively on Georgian bay, is practically a sunken pound net of smaller dimensions and completely submerged, the main difference being that the pot, or crib, is closed at the top—not open as in the pound net. It is held in place by three anchors, and being simply a floating net, is removable at any time by the fishermen. Owing to the extreme difficulty of regulating these nets, they have been made unlawful in the Georgian bay.

Seines.—A drag seine consists of a piece of net with a small mesh, and shaped in the form of a sling. It varies in length up to 300 yards. It has a cork line along the top and a lead line on the bottom. One end is fastened to the shore, and the fishermen, awaiting an opportune time to inclose a school of fish, row out into the lake with the other end, and, making a wide sweep, bring it to shore, inclosing whatever fish may be within its sweep. Both ends are then overhauled until the bunt or centre of the net is brought ashore containing the fish. Immense hauls have been made by means of the seine, and, owing to the damage which it does to the spawning beds and the small, immature fish which are necessarily brought ashore, its use has been prohibited. It has been claimed that as the wings are terminal and portions of the net on each side of the bunt, or centre, are of larger mesh, the small fish should escape; but, owing to the way in which the net is dragged, the larger meshes are closed, and few fish escape. The bunt, or bag, is of small mesh to prevent the fish gilling.

### PRESENT STATE OF THE FISHERIES.

Whitefish.—Forty or fifty years ago immense quantities of lake whitefish were caught all over Georgian bay from Collingwood northward. Some thirty years since, a marked diminution was noticed, and the rapid and serious decline has continued from that time in the supply of this valuable fish. At the present time the depletion is so alarming in the Georgian bay waters that, unless drastic measures are immediately taken for its protection and preservation, this most valuable of all lake food fishes will become well-nigh extinct. The whole evidence gathered from witnesses at the most diverse points leads irresistibly to the conclusion that the present catches of whitefish are only a small proportion of the earlier catches, even with the largely increased machinery and amounts of nets and gear. The figures given below are startlingly instructive:—

Quantity of whitefish taken in different years, from 1875 to 1906, inclusive:—

ittly of willoensh bakon in day	0.010.000	11-
1088	2,346,800	10.
1875	1.042.000	11
1880	1,421,100	**
1009	1.355275	11
1885	1 403 101	3.5
1906	1,259,450	- 11
1906		

8-9 EDWARD VII., A. 1909

Lake Trout.—This fish is next in importance to the whitefish as a merchantable commodity, although of late years the pickerel is coming very fast to take rank above the trout in commercial importance. Existing evidence points to the conclusion that the trout are not diminishing at anything like the rate of the whitefish.

The quantity of lake trout taken in the Georgian bay and north channel in the several years from 1880 to 1906, inclusive is:—

1880	1.100.800	lb
1885	3.369.860	11
1890	3 496 240	11
1895	3 062 604	11
1900.	2.807.233	
1905	3 498 390	11
1906	2 525 610	1,1
	9,999,010	1.1

At the same time, it must be remembered in considering these large catches that, although the quantity of fish taken remains about the same, the quantity of nets used is largely increased, while the mesh has grown smaller. So, although the diminution in our lake trout is not so marked as in the case of the whitefish, there is still a decline.

Pickerel.—The supply of pickerel or pike-perch or doré in the Georgian bay seems to be on the increase, or else they are coming more plentifully into the net of the fisherman. While pickerel has been considered a coarse fish, the yellow pickerel, which is the most abundant species in the Georgian bay, is rapidly coming to the forefront as a food fish, and is almost, if not as valuable, from a merchantable point of view, as the trout. There seems to be a more particular demand for this fish in the American market, and, on account of the firmness of its flesh, it is a fish that is easily kept for a considerable length of time, and is in prime condition when offered for sale. During the winter months, pickerel brings specially a high price in the American markets, where it is esteemed highly by the Jewish people, and has been sold for as much as forty cents a pound.

Lake herring.—The lake herring fishery has always been of secondary importance in these waters, though in the southern portion of the Georgian bay it has been of somewhat greater value to the fishermen than in other parts. The supply of herring has not apparently declined, and the value has slightly increased; but there can be no fully satisfactory enforcement of the whitefish and trout close season if herring fishing is allowed to continue, as heretofore, during the month of November. As the herring are more valuable as food to the superior commercial fishes than as a marketable product themselves, the view exists that no nets whatever should be allowed for the taking of herring. There can be no doubt that if the herring are seriously depleted, such fish as trout and pickerel will prey even more extensively upon the young whitefish, so that it is of more importance to the fisheries to discourage the netting of herring than to allow a herring fishery to continue which, after all, is of inferior value and importance to the fishermen of the Georgian bay.

Other coarse fish.—We find that suckers, carp, mullets and other species of coarse fish are undoubtedly on the increase on the Georgian bay, particularly in the north channel, but one important fact is thrust forward, and that is that the coarse fish are rapidly becoming a marketable commodity to a considerable degree. Although coarse fish in the Georgian bay do not command as high a price as these fish in Lake Erie, which is close to the American market, still they have a value, although it is perhaps too small to make the catching of coarse fish a paying business. Suckers and carp can hardly be sold in the province of Ontario to Canadians, and the cost of transportation to other markets is too large to make the capture of coarse fish profitable. There appears, therefore, to be no ground for any protective measures to be adopted for their protection, but on the contrary, their capture should undoubtedly be encouraged.

### RECOMMENDATIONS REGARDING NETS.

The International Fishery Commission, in 1896 gave expression to views so strongly corroborated by the evidence taken by us at our recent sittings, that we have no hesitation in quoting the same verbatim before we proceed to express our own particular conclusions. The International Commissioners said:—

'For many years the Georgian bay has been one of the principal sources of the market supply of whitefish, as already stated, and the fishery has been carried on with more vigour and enterprise than anywhere else in Canadian fresh waters. Whitefish and trout are found over the entire area of the bay and north channel, and furnish almost the sole object of the fishery. Prior to 1895, the amount of apparatus employed had not varied much for about 20 years, and the output has been constant.

### (1) MESH OF GILL NETS.

a hardship to bring into force a change without ample notice, and we think that a period of three years should be specified as time sufficient for the fishermen to use up the present nets, viz., the years 1908, 1909 and 1910; but in 1911 a mesh of 5 inches extension should be used universally in the Georgian bay waters and north channel, and should be specified as the minimum legal mesh. The effect of this gradual increase in the size of the mesh would, without doubt, go far to preserve the immature fish and raise the average size of whitefish and lake trout all over the waters referred to, without too harshly pressing upon the men actually engage in the gill net fisheries, and who will ultimately derive great and permanent benefit by this step.

### (2) POUND NETS.

The commissioners found that in some parts of Georgian bay, a keen controversy has continued for many years on the relative destructiveness of gill nets and pound-nets, the gill-net men affirming with the utmost confidence that the pound-nets are responsible for the decline of the fisheries, and the pound net men are emphatic in their opinion that the gill nets are the cause. Having looked into the matter very carefully, and having studied the pound net in all its bearings, making personal investigations and trials with various meshes of net in the pot, or crib, of the pound net, and having watched the setting and lifting the net, and the culling of the fish, and the removing of those illegal and unsuitable in size for the demands of market, they found the pound net to be the most efficacious instrument for catching fish, inasmuch as all schools of 'leading' fish which strike the lead get into the crib, while the condition of the fish caught is far superior from a merchantable and edible point of view than gill netted fish. Gill netted fish are choked to death and may be left sometimes for days in the water before being brought to land, and a considerable proportion frequently cannot be marketed, but have to go to the salt barrel. On the other hand, the fish taken in pound nets are kept alive until actually put in the boat and taken ashore, and are therefore in a much better condition both as to appearance and hardiness. The method of fishing is far easier for the operator than the gill net. There is some trouble and difficulty in setting pound nets in spring and taking them up in the fall, but being set close inshore they are usually accessible by boat. Further, the great benefit which the pound net undoubtedly performs for the fisheries is that it captures a large number of the coarse predaceous species, which would otherwise be left in the water to wage their destructive warfare against the more valuable kinds. The gill nets do not catch these fish, and indeed are set as far as possible from the localities favoured by these inferior fish. The proportion of rough fish caught in the pound net is estimated at

8-9 EDWARD VII., A. 1909

more than one-half of the catch, if pickerel be included. Suckers, carp, mullets, grasspike and other common species are taken. These fish escape the gill net. Another merit, from an official point of view, is its stationary character. It is readily perceptible above the service of the water, and easily regulated and controlled. In the case of the pound net, the fish must come to the net, whereas in the gill net it can be moved at any time, the schools of fish followed up and the nets set in their immediate vicinity.

### (3) EVILS OF POUND NETS.

The prevalent evils connected with pound net fishing are plain and easily remediable, and owing to the lack of proper restriction and control in past years may be largely attributed the depletion of the fish supply. There has been the most reprehensible laxity in the supervision and regulation of pound nets in Georgian bay. They have been permitted to be set in close proximity to important whitefish spawning beds, and two small a mesh has been allowed to be used in the pot, so that immense numbers of immature fish, not fit for the market, were captured. These had to be thrown away, as the meshes used, 2,  $2\frac{1}{4}$ ,  $2\frac{1}{2}$  and 3 inches, captured all the small fish which went into the net. The use of pound nets began early, as United States fishermen in 1858 set them in Canadian waters around St. Joseph Island, and caught such multitudes of fish that the Canadian fishermen were stimulated to imitate the American methods, and wasteful fishing thus began fifty years ago, although Canadians did not fish pound nets in the north channel until about 1880. The most serious evils, as we have said, were that too small a mesh was used, that too small fish were captured in quantities, and no effort was made to return them alive to the water. Another grave drawback was that coarse predaceous fish, like suckers and spawn destroyers, instead of being taken ashore and destroyed, were liberated, thus not diminishing in any way the enemies of the valuable commercial fish. If these evils can be overcome, as no doubt they can, the pound net, with proper restrictions and regulations, is a legitimate mode of catching fish. The conclusion seems reasonable, however, that it is only desirable in suitable localities, and there are areas where pound net is not commendable. It has been strongly urged by gill-net fishermen that it was impossible for pound net fishermen to release immature fish uninjured, and that in the pot the thrashing of the larger fish and the rude handling by the fishermen mortally injured the small fish, even if returned alive to the water. Much evidence exists pro and con upon this subject. Without coming to any conclusion regarding these views, it appears not advisable to leave the matter of returning the fish to the water solely in the hands of the fishermen, but consider that a much larger mesh, sufficient to allow undersized fish to escape, should be made obligatory in all pound nets. Of course, the pound net, being made of a different thread, thickly tarred before using, and hung in a more rigid and unyielding manner than the gill net, will allow a larger fish to pass through than a gill net of similar mesh. The gill net, being of thin thread, and hung loosely, entangles the fish, even if not properly noosed or gilled; but in the pound net the fish cannot be thus tangled up, but can go straight through if the mesh is large enough.

### STATISTICS FOR ONTARIO

8-9 EDWARD VII., A. 1909 ONT

### RETURN of the Number of Fishermen, Tonnage and Value of Tugs,

	Fishing Material.										
Districts.	7	lugs	or Ves	sels.	els. Boats.			Gill	Nets.	Pound Nets.	
Number.	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Yards.	Value,	Number.	Value.
Lake of the Woods and Rainy River District.			\$	1		\$			\$		\$
4 Vermilion Lake			6000		9 3 1 3 1 4 2	200 375 200 800 450	19 8 3 7 2 8 5	12000 3000 2000 6000 2000 9000 3000	875 250 800 250 1150 450		2000
Totals	4	300	6000	12	26	4850	57	44000	5800	14	2000
Values \$  Lake Superior.							, , ,		• • • • •		
1 Thunder Bay 2 Point Mamainse 3 Gros Cap 4 Michipicoten Island. 5 Gargantua. 6 Goulais Bay. 7 Richardson's Harbour. 8 Batchewana Bay.	1 2	15 58 71	46020 1500 1500 10000 15000 74020	3 16 	3 4	400	5	270600 24000 10500 24000 48000 7500 48000 18100 450700	15670 1500 65 1500 3000 500 3000 765	31	3700
Values	_	3013	1020	1. 2			50	490700	20000	31	3700

### ARIO.

Vessels, Boats, Nets, &c., and the Fish caught during the Year 1907.

				Kinds	s of Fish	Ι.							
Herring, fresh, lb.	Whitefish, Ib.	Trout, lb.	Pickerel or Doré, lb.	Pike, lb.	Sturgeon, lb.	Sturgeon bladders, No.	Eels, 1b.	Perch, Ib.	Tullibee, lb.	Mixed and coarse fish, lb.	Caviare, 1b.	Value.	Number.
												8	
	239600 147640 20000 12500 85000 18260 13000	2960 80 10000 16460 9020 3350 500	88990 24220 500 6800 16000 8000 8200	2000 10250 1500 6350					750 6000	100000		56,025 19,595 3,050 9,105 11,825 4,764 2,678	1 2 3 4 5 6 7
	76000		6300	6000	1400							8,920	18
	611000	42310	159010	122150	92520	200		300	15700	100000	4900		
	61200	4231	15901	9772	13878	120		15	942	5000	4900	115,959	
799200	223810 4060 7500 6200 14350 4350	56590 4500 24000 149530 5650		900					200	22200		185,154 6,077 1,215 3,020 16,595 1,072 21,841	1 2 3 4 5 6
	13320 27050								1900			5,730	. 8
799200	300640	1575040	63240	2850	2540		29600		55950	22200			
39960	30064	157504	6324	228	381		1776		3357	1110		240,704	

8-9 EDWARD VII., A. 1909

ONT

RETURN of the Number of Fishermen, Tonnage and Value of Tugs, Vessels,

		FISHING MATERIAL.										
	Districts.	Tugs or Vessels.					Boats	, ) .	Gill Nets.		Pou'd Nets	
A MISTOCKE		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Yards.	Value.	Number.	Value.
L	Lake Huron (North Channel).			\$	,	6	\$ 1100	13	30000	\$ 1200 90	2	\$ 50 17
345	St. Joseph's Island					3 1 1 3 3	200 45 500 650 700	4 2 2 6 6	11000 6000	560 1100	6 5 5	200 120 120 300
8 9 0 1	Kagawong	1 1 3 1	12 12 15 65 15	2000 2000 2000 18000 3500	5 5 18 3	3 2 1	300 110 260	2 2 2	78000 20000 36000	900 3000 8100 2500 3600	10	240
3456	Cockburn Island West Bay Fitzwilliam Island Squaw Island Duck Islands. South Bay Mouth	1  4 3 3	70 63 46	15000 13000 8000	6 24 16 20	3 2 6 1 7	1050 175 560 200 1100 1270	7 5 12 2 14 15	12000 36000 102000 114000 132000	450 2775 10700 9000 8465	5	125
8901	Killarney Bustard Islands John and Aird Islands	$\begin{array}{c} 2\\1\\\dots\\1\end{array}$	55 10	7000 3000	10 6	12 6 2 1	1510 750 200 100	23 12 2 2	63200 84000 6000 4000	5500 10800 300 €00	10	150 240 200
3	Bedford Islands					3 2	300 800	5 8			8 11 ———	-30
	Totals	22	394	80500	122	75	11880	150	776200	69580	90	230
	Georgian Bay.											
4		6		700 24800	28 22 29 32	5 15 17 18 4	980 1950 980 2400 1125 515 2822	18 30 35 34 8 79	$\begin{array}{c} 222000 \\ 54000 \\ 45600 \\ 101000 \\ 266000 \\ 18000 \\ 306700 \\ \end{array}$	3625 18090 1000	1	4
	Totals	24	494	60800	111	111	10772	204	1013300	66630	1	4
	Values											
646.6	Lake Huron (Proper). Cape Hurd to Southampton Southampton to Pine Point County Huron County Lambton, including St.	1 2	60	6000	12	5		8	505500 116150 127200	6615 3500	7	12
	Clair River	1		-					35000			148
	Totals	13	344	43000	72	128	15941	238	783850	40436	76	160

### ARIO-Continued.

Boats, Nets, &c., also the Kinds and Quantities of Fish caught during the Year 1907.

								FISH.	DS OF	KIN						
Value.		Sturgeon bladders, No.	Caviare, 1b.	Mixed and coarse fish,	Catfish, 1b.	Perch, 1b,	Sturgeon, lb.	Pike, lb.	Pickerel or Doré, 1b.	Trout, Ib.	Trout, salted, brls.	Whitefish, salted, bels.	Whitefish, lb.	Herring, fresh, lb.	Herring, salted, buts	
\$ cts.			1				1									
7,636 00 634 90 3359 00 6,509 90 4,400 00 4,424 00 7,833 00 9,570 00 13,765 00 24,340 00 24,340 00 9,150 00 37,090 00 50,020 00 36,964 00 13,562 00 21,100 00 16,655 00 3,840 00 9,629 00 5,500 00			80 20 20 408	20000 8500 2000 64300	50 50 600 900 11700	300	4000 2000 500 1320 1180 200 180 3000 1960 8200 2000 24540	1000 	25950 20000 120000 5700 60300 1200	48340 1600 500 2000 7000 3970 12960 23530 209090 56950 1000 35500 249400 372005 52540 101000 2800 4000 1604080	9 49 21 20 41		27700 2000 110000 120300 36790 55440 90000 2000 300 22100 1200 30000		15	
95,081 00	-1-		408	3215	136	15 	3681	4320	34595	166508	1400	250	78778	1585	14	
55,005 50 8,134 90 7,555 00 11,398 00 36,700 00 4,087 00 53,335 00			995	12400 5160 7000			1500 4940 400	1300 47250 500 10900 15	1400 6575 	334100 15700 28200 51790 358900	10 35 34 16 56	26 10	211515 11750 33800 14570 3500 17600 205	4900 39720 6000	50i 2 19 <u>i</u>	
		1	1012	24500	100	1100	6840	59995	18375	1302183	151	46	293240	74900	45	
76,215 40			1012	1225		.5.5	1026	4800	1837	130218	1510	4%	24:024	37,45	eCação	
94,385 00 17,170 00 21,998 00 68,150 00	25	482		3280 9880 83360		64560 223620 33500	960	1500		748690 171700 63790			28400	47680 6120 114700	462	
	25	48	1127	96520	1650	 321680	6200	2200	398400	1062260	*23	-	41 42.)	188500	460	
201,703 00			:	4825	139	16084	020	176	39840		×220)	_		8425		

8-9 EDWARD VII., A. 1909

Return of the Number of Fishermen, Tonnage and Value of Tugs, Boats, Nets, &c., Year

		FISHING MATERIAL.												
	Districts.	Tugs and Vessels.					Boats.	} .	Gill N	Pound Nets.				
Number.		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Yards.	Value.	Number.	Value.		
2 3	Lake St. Clair.  River Thames Lake St. Clair Detroit River Totals  Values	7 5 	10	\$ 2600 1350 	12 8  20	20 13 96 25 154	365 2655 335	19 156 88		\$	10			
2 3 4 5 6 7 8 9 0 1 2 3	Lake Erie.  Pelee Island. Essex County Kent County Elgin West. Elgin East. Hougatton Walsingham Long Point. Charlotteville Inner Bay Woodhouse Haldimand. Port Maitland to Port Colborne. Port Colborne to Niagara Falls	2 1 3 2 12 2 1 1 	99	10500 8000 15100 8000 17450 10500 2500 11500 18200 6300	16 7 17 14 72 16 6	6 43 71 29 16 17 13 26 28 29 13 28	1000 7445 14450 7750 3120 530 370 1205 850  7998 178 700	12 66 109 39 38 34 33 70 72  61 19 34	14500 10000 80000 24000 136000 32000 5000 5000 5000 32000 5000 32000 32000 60500		57	2097 4103		
of the same of the	Totals Values8	36	763	108050	214	319	45596	587	480500	46893	250	894		

SESSIONAL PAPER No. 22

and the Quantities and Kinds of Fish caught in the Province of Ontario, for the 1907.

					Kind	s of 1	ish.						
Herring, salted, brls.	Herring, fresh, lb.	Whitefish, 1b.	Trout, lb.	Pickerel or doré, lb.	Pike, lb.	Sturgeon, 1b.	Perch, lb.	Catfish.	Mixed and coarse fish, lb.	Sturgeon caviare, lb.	Sturgeon bladders, No.	Whitefish, salted, brls.	Value.
	1												\$ ets.
	22 5545 50	119310 24500		21331 9036 46400 2000	8100 9510 15620 10365	1960 1290 37625	21007 5040 26390 625	19140 4945 17850 40	187860 128070 249240 50690	1261			15,049 65 8,909 30 40,212 10 6,051 45
	5617	143810		78767	43595	40875	53062	41975	615860	1261			
	280	14381		7876	3487	6131	2653	3358	30793	1261			70,222 50
i	83400	52850 48500 7760 2370 19560 230  53880 157970 31540	310 1000	4760 88760 205350 595400 108800 12530 99610 150 52320 1490 371430 342630 4980	31250 144000 1097300 	1360 6620 9240 3680  4800  9820 4300 12100	6100 75420 213320 43800 25600 6400 24620 740 17760 2700 5440 26040 12640 11940	725 6000 1790  6075 100 3150 9750 	8940 231500 194580 41500 11380 35560 58520 57140 133000 	97 550 1182 325 854 468 513 1145	20	300	8,878 00 67,563 00 170,054 00 89,473 00 66,330 00 8,022 00 18,875 00 4,719 00 9,955 00 8,182 00 52,027 00 66,962 00 24,936 00 7,653 00
1	1240 2821120	800 574290		$\frac{7620}{1895830}$	30800  1520200		472520	30600	812080	5134	265	300	
10	141056			189583	121616	7788		2448	40604	5134		3000	592,629 00

8-9 EDWARD VII., A. 1909
RETURN of the Number of Fishermen, Tonnage and Value of Tugs, Boats,

		FISHING MATERIAL.												
		Tugs or Vessels.					Boats		Gill-Nets.					
	Districts.	4			1									
Number.	_	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Yards,	Value.			
	Lake Ontario.			\$			\$				\$			
11	Lincoln Wentworth Halton Peel. York Ontario Durham Northumberland Prince Edward Bay of Quinté Amherst Island Wolfe Island and vicinity		522	1900		17 18 2	3466 3715 4060 400 1250 104 150 935 1390 4581 1300 458	98 34 37 2 12 2 19 90 182 48		96128 52200 122000 5000 44600 7900 3000 54000 37200 38900 19000 5280	4822 2038 4345 375 2567 214 150 1150 874 503 1450 79			
	Totals	4	-52	6900	<b>2</b> 8	389	21809	564		485208	18617			
	Values\$  Inland Waters.	•	******								•••••			
2	Frontenac CountyLeeds, Lennox and AddingtonRussell, Prescott, Carleton and Renfrew					77 55	1133 725	138 78	• • • •	2720 1080	310 99			
4	Counties	- 1	30	4400	14	41 18 6	284 2615 100	45 36 6		6560 4500	104 150			
	Totals	5	30	4400	14	197	4857	303		14860	663			
	Values									,				

SESSIONAL PAPER No. 22

Nets, &c., also Kinds of Fish caught during the Year 1907.

						₹.	of Fisi	KINDS	]					
Value.	Caviare, 1b.	Mixed and coarse fish, 1b.	Catfish, lb.	Tullibee, lb.	Perch, lb.	Eels, lb.	Sturgeon, lb.	Pike, 1b.	Pickerel or doré, lb.	Trout, lb.	Trout, salted, brls.	Whitefish, lb. Whitefish, salted, brls.	Herring, fresh, lb.	Herring, salted, brls.
\$ cts.											İ			
33,470 00 10,617 00 10,630 00 1,414 00 3,928 00 415 00 1,132 00 12,002 00 15,019 00 59,900 00 19,260 00 7,471 00		10580 21700 340 6180 20 2000 35920 28360 150880 1200 25960	3500 700 225 24150 17600 221625 600 28900	2600	5440 1460 500 160 23940 10600 98300 11460 17020	1050 600 300 100 1950 5400	380	3200 40000 450 550 50 33000 13500 155050 22800 27600	14730 930 60 2450 40520 13410 290	8000 1800 5000 11320 40 1500 29680 32260 16190		23600	470540 79380 209000 10000 40000 6140 16000 12520 15280 47920 6680	
					168920	20400	7080	296200	72390	105790	7	343690 1	913460	476
175,258 00		14157	23784	189	8446	1224	1062	23296	7239	10579	70	34369 10	45673	4760
7,919 50 6,005 00			27200 37300		6720 8980			25150 6950		1000			4880 5000	$7\frac{1}{2}$
2,966 50 50,183 00 179 00		50390	500		100		50 83980		590 159700	1000 205		570 27800 1250	56990 20	
	9455	198890	65000		15800		84030	82850	160290	2205		29620	66890	 "12
67,253 00	9455	9944	5200		790		12604	6628	16029	220		2962	334450	75

### 8-9 EDWARD VII., A. 1909 ONTARIO

## RECAPITULATION of the Number of Fishermen, Tonnage and

	FISHING MATERIAL.											
Districts.	r.	Tugs or	Vessels.			Boats	š.	Gill 1	Vets.			
Number	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men	Yards.	Value.			
!			\$			\$			\$			
1 Lake of the Woods and Rainy River. Lake Superior 3 Lake Huron (North Channel) 4 Georgian Bay 5 Lake Huron (Proper) 6 Lake St. Clair and River Thames. 7 Lake Erie. 8 Lake Ontario. 9 Inland Waters, including Lake Nipissing.	4 29 22 24 13 12 36 4	300 393 394 494 344 10 763 52	6000 74020 80500 60800 43000 3950 108050 6900 4400	12 132 122 111 72 20 214 28	49 75 111 128 154 319 389	3905 11880 10772 15941 15015 45596	57 50 150 204 238 302 587 564	44000 450700 776200 1013300 783850 480500 485208	5800 26000 69580 66036 40430 46898 1.8617			
Total	149	2780	387620	725	1448	134625	2455	4048618	27401			

### RECAPITULATION of the quantity of Fish

Number.	Districts.	Herring salted, brls.	Herring, fresh, lb.	Whitefish, 1b.	Whitefish, salted	Trout. 1b.	Trout, salted,
3 La 4 Ge 5 La 6 La 7 La 8 La	ke of of the Woods and Rainy Riverke Superior. ke Huron (North Channel). orgian Bay ke Huron (Proper) ke St. Clair and River Thames ke Erie. ke Ontario and Waters, including Lake Nipissing	$\begin{array}{c} 19 \\ 99\frac{1}{2} \\ 462 \end{array}$	799200 31700 74900 168500 5617 2821120 913460 66890	612000 300640 787780 293240 81820 143810 574290 343690 29620	46 1	42310 1575040 1665080 1302183 1062260 1760 105790 2205	140 151 823
	Totals	1065	4881387	3166890	373	5756628	1121
!	Values\$	10650	244069	316689	3730	575662	11210

SESSIONAL PAPER No. 22 FISHERIES—Concluded.

Value of Tugs, Vessels, Boats, Fishing Material, &c., for 1907.

				OTHE	R FIXTUR		SED					
	Seines.		Pound	Nets.	Ноор	Nets.	Night	Lines.	Freeze ice-ho	ers and		es and erves.
Number.	Yards.	Value.	Number.	Value.	Number.	Value.	Number Hooks.	Value.	Number.	Value.	Number.	Value.
1		\$		\$		\$		\$		\$ -		\$
25 73 51 6	939 10266 17250 60		10	2000 3700 23025 400 16080 2625 89425		250 10 7110 3425	3200 12100	121	122	10825 14600 5600 17750 10100 775 47070 3178	2 2 8  14 5	200 2100 2500 7425 6595 1000
11	255	320	20	7990	80	1530	4300	46	22	5815		
166	28770	9665	492	145245	483	12325	20900	371	275	115713	32	19820

# caught in Ontario for 1907- Concluded.

Pikerel or Doré, Ib.	Pike, lb.	Sturgeon, 1b.	Eels, lb.	Perch, lb.	Tullibee, lb.	Catfish, 1b.	Mixed and coarse fish, lb	Caviare.	Sturgeon bladders, No.	Value.
159010 63240 345950 18375 398400 78767 1895830 72390 160290	122150 2850 54000 59995 2200 43595 1520200 296200 82850	92520 2540 24540 6840 6200 40875 51920 7080 84030	20400	300 1100 321680 53062 472520 168920 15800		1700 100 1650 41975 30600	100000 22200 64300 24500 96520 615860 812080 283140 198890		4825	115,959 00 1 240,704 00 2 295,081 00 3 176,215 40 4 201,703 00 5 70,222 50 6 592,629 00 7 175,258 00 8 67,253 00 9
3192252	2184040	316545	50000	1033682	74800	438325	2217490	23297	5290	
319225	174723	47481	3000	51684	4488	35066	110874	23297	3174	1,935,024 90

## RECAPITULATION.

Of the Fishing Tugs, Boats, Nets, &c., employed in the Province of Ontario, 1907.

Articles.	Value.
	\$
49 tugs (2,780 tons), 725 men., ,448 boats, 2,455 men., ,048,618 yds. gill net. ,66 seines (28,770 yds) ,92 pound nets.	387,62
10.18 618 vds gill not	134,62
(50 spines (98 770 vds)	274,01
92 pound nets	9,66
83 hoop nets. 90,900 hooks on set lines. 75 feeezers and ice houses.	145,15
30,900 hooks on set lines	14,04
75 feeezers and ice houses	37 115,71
2 piers and wharfs. 0 spears	19,82
0 spears	9

STATEMENT of the Yield and the Value of the Fisheries of the Province for the Year, 1907.

Kinds of Fish.	Quantity.	Price.	Value.
Whitefish brls.  Trout lb.  Trout brls.  II. Herring brls.  Pickerel lb.  Pike " Sturgeon " Caviare " Bladders " Eels Perch " Catfish " Coarse Fish " Tullibee "  Total	3,166,890 1,121 5,756,628 1,065 4,881,387 3,192,252 2,184,040 316,545 23,297 5,290 50,000 1,033,682 438,325 2,217,490 74,800	0 10 10 00 0 10 10 00 0 05 0 10 0 08 0 15 1 00 0 60 0 06 0 05 0 08	3,730 00 316,689 00 11,210 00 575,662 80 10,650 00 244,069 35 319,225 20 174,723 20 47,481 75 23,297 00 3,1074 00 51,684 10

### COMPARATIVE Statement of the Yield of the Fisheries of the Province.

Kinds of Fish.	1906.	1907.	Increase.	Decrease
Thitefish	2,875,450	3,166,890	291,440	
n (salted)	52,200	74,600	22,400	
erring	4,280,500	4,881,387	600,887	
" (salted)	263,200	213,000		50,2
rout	6,456,260	5,756,628		699,6
" (salted) !!	475,000	224,200		250,8
ickerel "	2,956,200	3,192,250	236,050	
ike "	1,950,200	2,184,040	233,840	
ourgeon	329,000	316,545		12,4
aviare	21,520	23,297	1,777	
els "	20,100	50,000	29,900	
erch "	754,700	1,033,682	278,982	
atfish	530,800	438, 325		92,
parse fish	2,138,200	2,217,490	79,290	
ıllibee	38,000	74,800	36,800	
ladders "	500	5,290	4,790	
Total	23,141,830	23,852,424	1 819 156	1,105,5

### APPENDIX No. 8.

# MANITOBA.

REPORT ON THE FISHERIES OF MANITOBA, FOR THE YEAR 1907, BY THE INSPECTOR OF FISHERIES WM. S. YOUNG.

SELKIRK, Man., June 1, 1908.

To the Dominion Commissioner of Fisheries, Ottawa, Canada.

SIR,—I have the honour to submit the annual report on the yield of the fisheries for the province of Manitoba and the unorganized district of Keewatin lying north and east of the province of Manitoba, for the year ending 31st March, 1908, including statistics showing the number of men employed, the number of boats, nets, &c., their

value, and varieties and quantities of fish caught.

The subdivisions of my district are the same as made in my last report, with exception of a change in the Lake Winnipeg district which is as follows:—Lake Winnipeg and its tributaries, comprising the principal waterways, as the Red river flowing from the south; the Winnipeg river and its expansions forming from the east. Lakes Winnipegosis, Waterhen and Dauphin comprise all the waters of Lake Winnipegosis, which lies about the centre of the province and extends to the northern end of the province; Lake Dauphin lies to the south of Winnipegosis Waterhen river or lake lies in between the waters of Winnipegosis and Lake Manitoba.

The following waters comprise the Lake Manitoba district: Manitoba, Shoal and St. Martin. Lake Manitoba lies between Lake Winnipeg and Winnipegosis; St. Martin lies between Lakes Winnipeg and Manitoba, and is connected to both of these bodies of water by the Little Saskatchewan river on the one side and the Fairford river

on the other, which are also included in this district.

Lakes Moose, Atikameg, Comorant, and Saskatchewan river comprise a chain of lakes lying to the north of the Saskatchewan river and east of the eastern boundary of the province of Saskatchewan, there is also included all the waters of the Saskatchewan river and its expansions and tributaries.

Nelson river, Hudson and James Bay district comprise all the waters of the Nelson

river and its expansions and tributaries.

Lakes Rock, Pelican, Swan and Louise and a district formed of small lakes lying to the south and west of the province, the principal ones of which are Lakes Oak, Clearwater, and Killarney, and Fish lake on the boundary line, a portion of which extends across into the State of Dakota.

The yield and value of fish produced are as follows:—

Kinds of Fish.	Lbs.	Value.
		ş
Vhitefish	3,695,000	258,650
Prout	100,000	7,000
Pickerel	3,995,000	239,700
ike	2,321,000	81,23
turgeon	177,000	17,700
Perch	82,000	2,870
'ullibee	1,380,000	48,30
Catfish	175,000	14,000
Coarse fish	2,425,000	52,000
voldeves	586,000	17,710
Home consumption	1,665,000	49,950
Caviare	17,500	17,500
Total	16,538,500	806,618

In the production and handling of these fish twenty-two tugs and vessels were used, of a tonnage of ten hundred and thirty-four tons, valued at one hundred and thirty-two thousand eight hundred dollars, on which were employed one hundred and forty-nine men.

Also five hundred and thirty boats were used, valued at twenty-four thousand, eight hundred and seventy-five dollars, on which seven hundred and five men were

employed.

The total amount of capital invested in the fisheries of my districts amounting to the sum of five hundred and ten thousand, four hundred dollars. In connection with

the work of our fisheries over eighteen hundred men were employed.

It will be noted that there is a large falling off in the production of whitefish, while the apparatus used was practically the same as used the previous year. In the first place, the season was a month later than usual in opening up, it being about the first of July before any fish were taken. Throughout the summer season the weather conditions were very unfavourable for successful operations of the fisheries, which created a shortage in the catch. My observations lead me to believe that the shortage was entirely due to the above cause, and not from depletion of the fishery. I have no doubt but that when the weather conditions are favourable for successful operations the fishery will redeem itself.

The only other fishery operated, during the summer season, is that of Cedar and Moose lakes, and Nelson river districts, which kept up their previous record by yielding in value of fish caught to the amount of thirty-two thousand, one hundred and seventy-five dollars.

All the winter fisheries did well, although the catch is under the average. This was not caused by any scarcity of fish but owing to the fact of an overloaded market, on account of which many fishermen pulled out their nets and suspended operations.

In conclusion, I would like to say that the action of the department in passing an order in council shortening the commercial season will have the desired effect of protecting the whitefish of Lake Winnipeg, which was heretofore prosecuted up to the fifth day of October. I am satisfied that the fisheries will have a good future if the policy of the department is carried out, by keeping the commercial season as it is at present, which dates from the first day of June to the fifteenth day of August. The policy of the department will redound to their credit by protecting the fisheries without seriously curtailing the industry.

All of which is respectfully submitted.

I have the honour to be, sir, Your obedient servant,

W. S. YOUNG,

Inspector of Fisheries

RETURN of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, the Quantity and Value of all Fishing Materials, &c., in the Fishing Industry in the Province of Manitoba and Keewatin for the Year 1907-08.

		Number.			67	ಣ	4	70 O	
RES	Piers and Wharfs.	Value.	60	15000	1000	:	200	200	16400
IXTU	Pi Wb	Number.		29	67	:	4	Ħ:	36
OTHER FIXTURES USED.	Freezers and Ice-House.	Value.	6/9	96 212000	0006	2000	200	3000	111 226500
O	Fre al	Number.		96	20	ಣ	4	eo :	
		Men employed, and docks.		325	35	25	40	30	455
		Value.	66	:	:	:	3600		3600
	Pound-nets.	Number.		:	:	:	12	: :	12
		Value.	₩	385	:	:	:	: :	385
	Seines.	Fathoms.		363	:	:		::	363
	20	Number.		11	:	:	:	* *	==
IAL.		Value.	₩	09999	12500	10830	9200	7200	705 10664 623250 106640
FISHING MATERIAL.	Gill-nets.	Fathoms.		40000	75000	00029	46000	36000 1250	623250
SHING	9	Number.		9999	1250	1083	920	720	10664
Fig		Men,		009	:	:	09	55	
	Boats.	Value.	<b>%</b>	19000	:	:	3000	2000	24075
		Number.		475	:	:	30	22	530
	ls.	Men.		115	10	ಯ	16		149
	Tugs or Vessels.	Value.	€€	829 102300	2000	1500	20000	4000	22 1034 132800
	10 s.81	Топпаке.			75	15	06	25	1034
	Ē.	Number.		13	ಣ	_	4	<del>-</del> :	22
	Districts.			Lake Winnipeg and its tributaries	2 Lakes Winnipegosis, Waterhen and Dauphin	3 Lakes Manitoba, Shoal and St. Martin	4 Lakes Cedar, Moose, Atikameg, Cornorant and Saskatchewan River.	of nusson and James Day and Nelson Myer district.  6 Lakes Rock, Pelican, Oak and Clearwater	Totals

SESSIONAL PAPER No. 22

RETURN showing the Kinds and Quantities of Fish in the Province of Manitoba and Keewatin for the Year 1907-08.

Number.	σů				6 00 4 70		00
VALUE.	<b>6</b>	498,265 (	114,885 (	78,420 (	75,820 ( 32,175 ( 7,050 (		806,615
Caviare, lb.		15000	:	:	2000	17500	49950 17500
Home consumption, lb.		750000	350000	300000	75000 150000 40000	1665000	49950
Goldeyes, lb.		400000	0009	100000		206000	52000 17710
Mixed and coarse fish, lb.		2000000	300000	100000	75000	Į.	
Catfish, lb.		175000				175000	48300 14000
Tullibee, lb.		1250000	2000	125000			
Perch, lb.		75000	:	2000		1	2870
Sturgeon, 1b.		150000	:	:	20000	177000	17700
Pike, lb.		754000	000009	0000006	2000 5000 60000	2321000	81235
Pickerel, Ib.		2750000	200000	300000	200000 5000 40000	3995000	239700
Trout, lb.		:	:	:	100000	100000	7000
Whitefish, lb.		20000000	200000	140000	350000	3695000	258650
Districts.		ake Winnipeg and its tributaries	akes Winnipegosis and Dauphin.	3 Lakes Manitoba Shoal and St. Martin.	4 Lakes Cedar, Moose, Atikameg and Cormorant and Saskatchewan River. 5 Nelson River and tributaries—Hudson and James Bays. 6 Lakes Rock, Pelican Oak and Clearwater.	Totals	Total Values
	Whitefish, lb.  Trout, lb.  Pickerel, lb.  Sturgeon, lb.  Tullibee, lb.  Catfish, lb.  Goldeyes, lb.  Home consumption, lb.  Gorarse	Whitefish, lb. Trout, lb. Pickerel, lb. Sturgeon, lb. Tullibee, lb. Catfish, lb. Catfish, lb. Catfish, lb. Catfish, lb. Catfish, lb. Catfish, lb. Catfish, lb. Catfish, lb.	20000000  Whitefish, lb. Pike, lb.  Prout, lb.  Prike,	2000000 Whitefish, lb.  Trout, lb.  Pickerel, lb.  Trullibee, lb.  Tullibee, lb.  Goldeyes, lb.  Tullibee, lb.  Tullibee, lb.  Tullibee, lb.  Goldeyes, lb.  Tullibee, lb.  Tullibee, lb.  Tullibee, lb.  Tullibee, lb.  Tullibee, lb.  Tullibee, lb.  Tullibee, lb.  Tullibee, lb.  Tooooo 1250000 175000 1250000 175000 114,885 00	Trout, lb.   Tro	700000 100000 20000 775000 114,885 00 114,885 00 115,000 10000 5000 77,000 10000 10000 10000 10000 114,885 00 115,820 00	September   Sept

## APPENDIX No. 9.

# SASKATCHEWAN.

REPORT ON THE FISHERIES OF SASKATCHEWAN BY INSPECTOR E. W. MILLER, FOR THE YEAR ENDING MARCH 30, 1908.

Qu'Appelle, Sask., April 1, 1908

To the Dominion Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to submit the following report on the fisheries of the province of Saskatchewan for the year ending March 31, 1908, together with statistical returns showing yield of fish, values of the catch, plant, &c.

The fishery year as now computed to coincide with the Dominion fiscal year, includes both the complete summer and winter seasons and thus enables a more exact

report than was formerly possible.

The extremely cold winter of 1906-7 made the lakes unusually late in breaking up, the ice continued quite solid throughout April, and it was not until the latter end of May that the lakes became wholly free of it. The spring spawning fish were correspondingly late in running and many of them caught in June were not clean fish. With the exception of the sturgeon fishery carried on in the Cumberland district, the fishing in summer season throughout the province was strictly for immediate local consumption, there being yet no provisions for the storage and conveyance of fish caught in hot weather. Only a few of the minor lakes are so situated as to permit of the speedy conveyance to a market of fish caught there in summer time. This is unfortunate, for then, locally, the best sale could be made. Early in the fall it became apparent that owing to the partial failure of the crop in many districts there would be many more settlers anxious to fish during the winter than in previous years. The number of licenses applied for was, in fact, more than double that of the previous winter, and there is no doubt that to those settlers conveniently situated near the lakes, the supply of fish obtained was most acceptable. In some cases the local markets were over supplied and prices ruled low accordingly. The export demand was also weak especially towards the close of the season, so that operations on the northern lakes terminated much earlier than usual and the returns were disappointing. The season was exceptionally mild and open which while favourable to the actual operations of the fishermen tended to make the safe storage and conveyance of the fish uncertain and difficult, which added to the large catch made in more eastern waters accounts for the comparatively poor demand and price.

No alterations was made in the conditions on which fishery licenses are issued in this province and consequently all fishing was done under 'domestic' licenses which are granted to individuals and only for a limited extent of net. Companies operating here have consequently to confine themselves to the fitting out of fishermen who have secured licenses and the subsequent purchase of their catch. This course has not been found very satisfactory and no large development of the more northern fisheries is likely under

these conditions.

Numerous applications are received from time to time for the stocking with fish of various small bodies of water; in nearly all cases these lakelets though appearing to the settler of recent years to be permanently fit by depth and area for the reception of fish, have been and are again liable to be at any time so reduced by a dry season or two as to be quite incapable of sustaining fish life: others have waters too alkaline. There are however a few cases in which it would appear that coarse fish could be placed

with justifiable hopes of success and it is desirable that provision should be made for such cases.

The active enforcement of the regulations against the taking of fish in their spawning seasons and the prevention of the use of illegal and destructive nets, &c., at other times, have been most successful in preserving a full supply of fish. At a few points the number of licenses has now reached the maximum number which can safely be issued without fear of depletion. At other remote points there is room for a large expansion of the fishing as soon as freighting facilities and the extension of settlement tend to make it remunerative.

In the older districts where the lakes are beginning to draw large numbers of summer visitors, there is a demand for the stocking of such waters as may be found suitable, with black bass so that bet'er sport may be offered to the angler. Many of the small lakes in the southern part of the province are already far more appreciated and visited for the purposes of recreation and pleasure than they ever were from a utilitarian standpoint, and any measures for this improvement of the nature suggested would meet with general favour.

Mr. Andrew Halkett, curator of the Department's museum at Ottawa, visited this province in the summer, and was successful in obtaining good specimens of the different species of fish life in our waters, including many small varieties which do not often come

under general observations.

Returns from the Grand Rapids and Nelson River districts, situated in Keewatin, were formerly included in the report of this inspectorate, but they have now been transferred to the Manitoba inspectorate. Consequently the very large catch made in Playgreen, Cedar, Moose and Clearwater Lakes for export, does not now appear in these returns, and the aggregate is smaller accordingly.

Four hundred and ninety seven licenses to fish with nets were issued during the year, a very large increase notwithstanding the reduction of the district to Saskatche-

wan alone.

Nineteen prosecutions were made for infringements of the Fisheries Act, a conviction being secured in each case.

In the small lakes of the Moose Mountain district no whitefish are found and a very limited number of net licenses are issued. The lakes are however much visited for pleasure purposes and the amount of angling done is very large.

At Fish lake, Guardian Powell reports that in the catches made pike are now as more numerous than formerly, when pickerel formed the main part, but both varieties well as mullet continue to be plentiful. At Gooseberry lake although but a small sheet of water large catches of pike were made until this year when none are to be found. This is attributed to the severe winter of 1906-7 when the ice formed was so thick that the water beneath became very impure and the fish nearly all died and were thrown upon the shore in spring. Overseer Silverthorn reports that the net fishing in Long lake was confined to a limited amount through the summer as has hitherto been the case owing to lack of proper means of marketing the fish in good condition. A large amount of angling was done and good catches of pike and pickerel made. A large number of the latter species died from some natural cause during the hotter months. A great increase took place in the winter fishery when whitefish formed the main catch, no less than ninety licenses being issued. The fishing is done by settlers resident in the district and the catch marketed locally, the cities of Regina and Moosejaw being well supplied from this lake. The dam on the Qu'Appelle river constructed by the Public Works Department to turn a portion of that river's flow into the lake, has been effectual in maintaining its level and while primarily constructed to improve the navigation of the lake, has materially benefited it from a fishery point of view. Whitefish were caught in the winter at places where in previous seasons it was quite useless to set nets.

The Qu'Appelle chain of lakes continue to show a slight improvement in the quantity of whitefish caught and certainly exhibit no falling off in the stock of the coarser varieties. The amount of angling done in these lakes is very large, both in summer and winter.

The Indians and many of the foreign settlers prefer setting hooks through the ice to fishing with nets and make astonishingly large catches in that way, though of course they do not get whitefish or tullibee. The largeness of the pike caught in these lakes is often a matter of remark, Guardian Leader reporting several instances where 30 lbs. were exceeded. The Katepwe dam remains in good shape and answers its purpose of preventing an excessive lowering of water level in these lakes.

Crooked and Round lakes, lower down the Qu'Appelle valley, have also kept in good condition. Only a few net licenses are in operation here but the number of visitors

to the lake and the catch of fish by angling shows a steady increase.

A large number of small lakes lie along the line of the Canadian Northern Railway in Eastern Saskatchewan, many of them are well stocked with pike and mullet, the principal ones being Fishing lake and Devil's lake. These waters are much appreciated by the settlers and a large amount of fishing in the aggregate is done. Licenses are issued for a small amount of netting only so as to make the fishing of as much general benefit as possible.

Eagle Quill Lake near Swift Current is noteworthy as the only lake in the province lying south of the Canadian Pacific Railway which contains whitefish. A fair catch is made here in proportion to the size of the lake, all of which meets with a ready local sale. In the Jackfish and Turtle lakes north of Battleford, the summer fishing was of the usual limited nature for local consumption only. The winter season however brought a very large increase, a much larger number of settlers taking out licenses than in any previous year, one hundred and twenty-three being issued. These lakes are not large enough to permit of so much net as that authorized by such a number of licenses, every year, but Guardian Schaefer reports that many of the license holders fished only a short time and that the full amount of net sanctioned was not used by a large number of the men. The catch made was very satisfactory and of course much in excess of local requirement. As mentioned in another portion of my report, the export demand was poor and towards the close of the season the prices realized by the fishermen were not very remunerative. Brightsand lake was also fished to a small extent, but it was found that nets set there were very quickly destroyed by a grub prevalent in its waters.

Cold lake, a large and beautiful lake on the boundaries of the two provinces about 90 miles north of Lloydminster, was fished more extensively this winter than heretofore. This lake is plentifully stocked with lake trout and very fine whitefish. In the summer the only call on it is the few fish caught by the band of Indians resident in its neighbourhood. Twenty licenses were granted for the winter fishery, the catch being drawn by sleigh to Lloydminster and thence exported. Owing to the great depth of this lake, fishing through the ice is rarely practicable until after Christmas, when brought within easier access, this and neighbouring lakes should give a large production of fish. Four carloads were shipped this winter.

In the Prince Albert district now under charge of Overseer Headrick, the summer season presents no special features of interest. There was a slight increase in the amount of fishing done in the two branches of the Saskatchewan river, but very little of the catch finds its way even to the local markets. At the beginning of the winter preparations were made for conduct of a fishery for the export trade at Montreal, Red Deer and the Trout lakes and fifty licenses taken out for that purpose. The fishermen were informed that they would have to restrict themselves to the amount of net authorized under their domestic licenses. Fish were found plentiful but the regular fishermen claimed that they were unable to make a profitable season under the conditions imposed. Moreover the market proved rather flat and consequently operations ceased at a much earlier date than usual. Only five carloads were exported from Prince Albert against nineteen the previous season. In the more northern lakes where the catch is at present confined to that needed by the traders, missionaries, and Indians for their food supply, conditions remained normal and no scarcity of fish is reported from any point.

There is, in this district, a large surplus of fish over and above local requirements and while under existing conditions no large and immediate development can be anticipated, the future will no doubt see a flourishing industry established.

In the Cumberland lakes, the summer sturgeon fishery was carried on but for a more limited season than in former years, owing to the stoppage of the transport facilities down the Saskatchewan river. Gill nets only were in use, the pound nets having

been discarded, their working not proving successful in these waters.

In conclusion I would say that the conditions attending the fishery in different parts of the province vary so much, that the present system of issuing one style of license only is proving more and more impracticable. The bulk of the licenses are issued to settlers who fish in the waters of their own immediate district and who do so only at such times as they can temporarily without inconvenience leave their main occupations. Their catch is consumed to a large degree by themselves and families and the balance disposed of among neighbours or sold in neighbouring villages and towns. Few of them use the full amount of net sanctioned by the domestic license. The case of men who wish to rely on fishing for their sole employment in the winter season is very different. Their fishing is done in lakes so situated that they have to make winter homes on the spot and fishing is their business. If they are not allowed to use the quantity at met they are capable of working efficiently, their work becomes desultory and unsatisfactory.

At the more northern lakes to which these men resort, and which lie in as yet unsettled districts there is no local demand for fish and they depend on the export of their catch from the nearest railway point. Transport to that point often takes a considerable percentage of the value of the fish and consequently to have a reasonably profitable season they must make a much larger catch than men fishing in more accessible waters. It will be seen therefore that changes in the regulations to enable such varying

conditions to be fairly dealt with have become very necessary.

I have the honour to be, sir,

Your most obedient servant,

ERNEST W. MILLER,

Inspector.

SASKATCHEWAN.

RETURN of the Number of Fishermen, Value of Boats, Nets, &c., and the Quantity and Value of all Fish in the Province of Saskatchewan for the Year 1907-8, by Fishery Inspector E. W. Miller, at Qu'Appelle.

1		Number.		स्थाळ <del>क</del> ्राच्		
	Value.		& cts.	19,540 00 30,240 00 23,160 00 20,250 00 9,300 00		1800 102,490 00
di ,di	sd serse	bas bəxiM		50000 40000 30000 30000 30000	180000	1800
	*1	Tullibee, lb		16000	26000	1040
	•9	Sturgeon, I	nonen reference.	3000 2000 40000	45000	3600
		Pike, lb.		220000 80000 110000 80000 40000	530000	15900
	•	Pickerel, lb	····	145000 10000 12000 15000 10000	187000	9350
		Trout, lb.		20000 30000 30000 5000	85000	5100
	'q	Whitefish,		80060 425000 280000 250000 60000	1095000	65700
ئ	nets.	Value.	<del>\$9</del>	1400 3150 2250 900 450	8150	1
FISHING MATERIAL.	Gill-nets.	Fathoms.		9000 21000 15000 6000 3000	54000	
IG M		Men   Licensed.		171 153 65 24 12	425	:
FISHIN	Boats.	Value.	60	1800 600 2500 1000	6500	
		Number.		100 100 100 100	520	1 :
	DISTRICTS.			1 Qu'Appelle. 2 Battleford 3 Prince Albert. 4 Northera Lakes 5 Cumberland.	Totals	Values
		Number,		HUSA TO SHENO		

### APPENDIX No. 10

### ALBERTA.

NOTE.—REMARKS ON SOME OF THE PRINCIPAL LAKES IN THAT PROVINCE PUBLISHED IN LAST YEAR'S REPORT.

Some of the principal fishing lakes of Alberta.

Lac la Biche.—This lake is well stocked with fish. Though the lake has been tried by experienced men, accustomed to fish in lake Winnipeg and other northern waters, they have not been able to catch fish after the real cold weather sets in. If the fish could be located a profitable fishing industry would spring up. This lake could stand one commercial license, without doing it any harm, especially if the fishing were limited to the winter months of the year.

Touchwood Lake.—This lake lies some twenty miles north of Lac la Biche. The whitefish in this lake will average about four pounds and are in fine condition. Pickerel are also fairly numerous in this lake. Within a radius of thirty miles of this lake there are many lakes where the conditions are exactly similar. Trout lake contains trout similar to that of Cold lake. None of these lakes are very large, and are only separated one from another by short portages of from one to six miles.

Buck Lake.—Thirty miles south west of Lac la Biche, which was at one time pretty well fished out is now well stocked with large whitefish. Formerly there were quite a number of half-breeds who lived at this lake and made a fishery there in the fall for winter use, and so fished out the lake. This fall fishing during spawning season, was stopped and the lake is now full of fine fish. There are very few Indians who resort to this lake now.

Beaver Lake.—The south end of this lake runs within three miles of Lac la Biche Fish spawn in it about October 7, while in Lac la Biche they do not b gin to spawn until the fifteenth. The lake which at one time was pretty well fished out is now well stocked with fish.

Whitefish Lake.—This lake is picking up, not because it is protected, but because it is not as heavily fished as in former years, many of the Indians having moved on to the reserve at Saddle lake.

Little Whitefish Lake.—Lying north of Victoria or Pakan, is a good little lake not much fished. The present close season for whitefish gives it no protection as the fish in it do not spawn until after Christmas.

Little Devil's Lake.—The whitefish in this lake do not increase, the lake is really just a widening of the Sturgeon river, which flows out of Lake Ste. Anne, and as it is now well stocked with fish there is nothing to prevent their passage to Devil's lake. The lake swarms with pike, they would have to be killed off before whitefish could make much headway in the lake. As this lake at one time was swarming with whitefish, it is a pity it could not be brought back to its former state, as it is so close to Edmonton.

White Whale Lake.—This lake is miscalled Wabamun on the maps. Wabamun is not an Indian word it me ins nothing. Wabamao is the Cree name of the lake and really means the Big Fish lake, as the Indians have a tradition of a very big fish of a white

 $22 - 14\frac{1}{2}$ 

colour having been seen there. The white traders on this account gave it the name of White Whale lake. The lake is well stocked with fish. Fishing on this lake is now confined to residents within a radius of two miles of the lake. Many of the settlers have no experience as fishermen, and were only learning the business last winter, and did not do much, especially in first part of season. Water overflowing the ice also was a great hindrance to the fishermen nearly all winter. The half breeds of Lake St. Anne were previous to this year allowed to fish in this lake. This is not now allowed.

Lake St. Anne.—This is another lake where the whitefish cannot be caught after cold weather sets in. The fishermen now that they cannot get leave to fish in White Whale lake will make greater effort to locate the fish, which are now very plentiful.

Shining Bank Lake.—This lake which is west of Lake Ste. Anne, is well stocked with large whitefish and is now attracting settlers and fishermen. I tried to send an officer there during the winter but the state of the roads was such that it was impossible for one man and a team to pass through. This lake will hereafter require supervision.

McLeod Lake.—The same remarks apply to this lake as to the previous one. The largest whitefish in the country are killed in this lake. They will average seven or eight pounds. Worms are very bad in this lake. A net set at night will be eaten up entirely by morning. Tanning the nets gives some protection but does not always prove effective.

Pigeon Lake.—A wonderful lake, heavily fished for years, the fish are still plentiful and always fat. Fishing in this lake is now confined to residents within a radius of one and a half miles. If summer fishing were to be carried on to any extent, the residence limit would have to be cut down.

Battle River Lake.—A beautiful little lake not too heavily stocked with whitefish. No fishing for sale on any kind of license should be allowed in this lake, as in its present state it will not stand heavy fishing.

RETURN of the Number of Fishermen, Number and Value of Fishing Boats, Nets and all Kinds of Fish in the Lakes of the Province of Alberta, for the Year 1907-8.\*

PROVINCE OF ALBERTA.

r.	Numbe		1284700788011281
	Value.	<b>₩</b>	1,215 2,520 1,720 1,720 11,400 22,450 1,050 9,660 2,585 2,585 3,490 2,586 2,586 2,586 2,586 2,476 1,050 1,05
	Mixed fish	Lbs.	4,000 52,000 52,000 135,000 33,000 13,000 110,000 110,000 370,200 3,70,200
e Fish.	Tullibee.	Lbs.	20,000
KINDS OF FISH.	Pike.	Lbs.	\$2,000 \$30,000 \$5,000 \$5,000 \$6,000 \$
	Pickerel.	Lbs.	1,500 1,500 1,500 1,500 4,500 4,000 2,500 2,025
	Whitefish.	Lbs.	20,000 24,000 39,000 392,000 25,000 25,000 48,000 48,000 48,000 38,800
	lines.	Value	100 100 100 100 100 100 100 100 100 100
	Hand lines.	No.	100 100 400 100 100 100 100
		Value	800 700 700 120 120 120 120 130 130 130 130 130 130 130 130 130 13
FISHING MATERIAL.	Gill-nets.	Fathoms.	7,500 450 1,200 3,000 20,000 1,800 2,500 1,800 1,900 1,300 1,300 1,300 1,300
ISHING		No.	250 45 20 20 40 40 60 60 60 60 60 80 80 80 80 80 80 80 80 80 80 80 80 80
F		Men.	80 110 110 120 120 120 144 175 77 77 77 100 100 115 115 115 115 115 115 115 115
	Boats.	Value	600 100 80 80 100 80 100 500 500 500 500 500 500 500
		No.	60 10 10 10 10 10 10 10 10 10 10 10 10 10
	Districts.		1 Lac LaBiche 2 Beaver, Cooking and Hasting Lakes 3 Heart Lake 4 Whitefish Lake 5 Buffalo Lake and vicinity 6 Pigeon Lake and vicinity 7 Conjuring Lake and vicinity 7 Conjuring Lake and vicinity 8 Ste. Anne Lake 9 White Whale Lake 10 Bad, Baptiste and Lalune Lakes 11 Buck Lake and vicinity 12 Finchwood Lake 13 Saskatchewan River in Alberta. Totals.  Totals.
*,	nampei		1284001001128

\* Mostly estimated.

### RECAPITULATION

Of the Yield and Value of the Fisheries of the Provinces of Manitoba, Saskatchewan and Alberta, in 1907-08.

Kinds of Fish.	Quantity.	Value.
Whitefish Lbs. Trout "Pickerel "Sturgeon "Sturgeon caviare Perch "Catfish "Gold eyes "Coarse fish, including home consumption "Total for 1907. Total for 1906.  Decrease "Discount of the consumption "Decrease "Decrease "Coarse fish of the consumption "Decrease "Decrease "Coarse fish of the consumption "Decrease "Decrease "Coarse fish of the consumption "Decrease "Decrease "Coarse fish of the consumption "Decrease "Decrease "Coarse fish of the consumption "Decrease "Coarse fish of the consumption "Decrease "Coarse fish of the consumption "Decrease "Coarse fish of the coarse fish		\$ . 363,150 12,100 251,075 111,025 21,300 17,500 2,870 50,240 14,000 17,710 107,452

### RECAPITULATION

OF the Fishing Crafts, Nets, &c., in the three above Named Western Provinces.

Articles.	Value.	Total.
	8	
22 fishing vessels or tugs (1,034 tons, 149 men)	132,800 33,155	165,95
721,240 fathoms of gill nets	120,820 385 3,600	100,00
950 hand lines 111 freezers	950 226,500	125,75
36 fishing piers and wharfs	16,400	242,90
Total		534,61

### APPENDIX No. 11.

# BRITISH COLUMBIA.

REPORT ON THE FISHERIES OF BRITISH COLUMBIA FOR THE YEAR 1907-8, BY INSPECTORS C. W. SWORD, J. T. WILLIAMS AND E. G. TAYLOR.

#### DISTRICT No. 1.

NEW WESTMINSTER, B.C., June 8, 1908.

To the Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to inclose statistics for District No. 1, British Columbia,

for the Fishery year ending 31st March last.

There is little to remark upon in these. The sockeye salmon run has been poor. The total pack for the Fraser river being only 59,815 cases against 178,787 in 1906 and 204,849 in 1903. The pack on Puget sound was 93,934 against 183,977 in 1906 and 151,828 in 1903.

The re-establishment of the annual close season from 25th of August to the 15th September, while worthless as regards supplying the depleted spawning grounds in the interior with eggs (such spawning grounds being dependent solely on the earlier runs) had a bad effect in preventing the possibility of using the fall fish to fill up with in a year like last.

Your obedient servant,

C. B. SWORD,

Inspector of Fisheries.

#### District No. 2.

VANCOUVER, B.C., March 11, 1908.

To the Dominion Commissioner of Fisheries,

SIR,—I have the honour to inclose my annual statistical report of the Fisheries of the Northern Coast of British Columbia, (District No. 2,) for the fiscal year ending March 31, 1908, including statement of salmon packs of the different canneries. These returns show a decrease in the aggregate, the total value of fish and fish products in 1907 being \$2,335,053, against \$2,589,474 in 1906. This is accounted for by the decrease in the Rivers Inlet pack, of some 28,000 cases.

#### SALMON.

The total pack of salmon for the district season, is as follows:—

1		
	1907	1906
	Cases.	Cases.
Sockeye	239,823	263,522
Cohoe	39.397	31,275
Conoe	14.460	22.277
Spring	14,400	45,101
Humpback	35,658	49,101

Approximate detailed decrease and increase, season 1907.

Skeena river,	decrease	,		t. e		ε			6			 				,	٠				, ,	, ,	3,000
Rivers Inlet	66			,								 					٠	,	 				28,000
Naas River	66									ø :	e s				۰					- 4		_	700
Northern Coa	st increa	25	е							 			,		à			۰	٠	3		,	5,000

By reference to the above figures it will be noticed that there is a decrease in the Rivers Inlet pack of about 28,000 cases. It is probable there was no diminution of salmon, the climatic conditions were not so favourable for catching the fish, as on the previous season.

The increase in the North Coast fisheries occurred at Bella Coola and Lowe Inlet, but at Kimsquit there was a failure, this matter will be dealt with further on in my report.

#### SKEENA RIVER.

With regard to the Skeena river I am pleased to report a good pack, almost equal to last season, the run of spring salmon was exceptionally good, there was a fair run of Steelhead, and some cannerymen are packing these excellent table fish in ice, and sending them to the Cold storage at New Westminster, where they are forwarded to their ultimate destination.

There were not so many commercial licenses issued as last season, consequently the pack is more encouraging. The regulations were fairly well observed; this season for the better protection of the salmon and the enforcement of the regulations, the department is building a fast gasolene launch, this vessel will be of valuable assistance to our officers in carrying out the aforesaid regulations.

Good fishing was obtained in the Oxstahl river a tributary of the Skeena. We have every reason for expecting an improvement in this river, in the near future. In the spring of 1905, certain obstructions were removed by the department, and since that time large quantities of salmon have been observed in the lake above where the obstruction existed.

Regarding the Upper Skeena I am able to report most satisfactory results from the work of our fishery officers. No barricades were constructed during last season, and the Indians confined their fishing operations to legal methods, securing an ample supply of food for themselves and families during the winter.

The Babine Indians with whom we had so much trouble in 1906, were perfectly contented with the nets provided them by the department, for catching their winter supply of food, and I consider great credit is due the department for the masterly manner in which this most difficult, complicated and delicate question was settled.

I attach extracts from Overseer Helgesen's interesting report of his work and observations in this district last season.

During February the department undertook the work of removing certain obstructions in the Copper river, a tributary of the Skeena, that had been in existence for a considerable time.

This obstruction was removed in sufficient time to enable the salmon, principally sockeye, to ascend to the large area of spawning ground at the head waters of this river, and during the fall a fishery officer was despatched to the head waters of this river, with instructions to report on the quantity and variety of the salmon reaching these spawning grounds. He reported large quantities of salmon of all varieties, with a large preponderance in favour of the sockeye. This I consider most gratifying as for the last twenty years this area of water has been entirely depopulated, owing to the obstructions in the river.

Some additional work remains to be done in this river, and the department have issued instructions to proceed immediately with it, this will be done as soon as climatic conditions are favo urable and render it possible.

Work on the removal of certain obstructions on Tatcha river, Babine lake has been authorized, and will be proceeded with, and I have every reason to believe, will be com-

pleted in sufficient time to allow the salmon to ascend to this additional area of spawning ground, which cannot be over estimated, considering the large quantities of salmon frequenting these waters and the limited area of spawning ground. In my opinion, the work of removing obstructions, thereby opening up new areas of spawning ground, and relieving the congestion frequently occurring there, is of paramount importance, I have always maintained and my experience teaches me that natural propagation is more effectual and satisfactory than artificial.

The new Babine Hatchery was erected this season, and some millions of eggs spawned, this is considered extremely satisfactory, taking into consideration the difficulties that were met with during construction, and the inaccessibility of the district and

location.

#### RIVERS INLET.

With reference to Rivers Inlet, I have to report a falling off in the catch of sockeye, in comparison with last season, this is not attributable to any specific cause, there were even more boats fishing than any previous year, it was considered about a three-

quarter pack.

Fishery Overseer Nordschow reports that the fishery regulations were only fairly observed, owing to the large quantity of boats fishing and the officers had difficulty in covering the extensive area of water. This season, however, the department has authorized the building of a gasolene launch, for the better protection of the fisheries in this district, which will assist the fishery guardians materially.

The spawning beds in Oweekeyno lake were patrolled as in previous years, the

Indians attempt no illegal fishing.

Large quantities of all varieties of salmon were observed in the lake and tributary spawning creek. It does not follow because the catch of salmon by the fishermen was smaller, that there were less fish than on previous years, climatic conditions affect the waters of this inlet, rendering them too clear for good fishing with gill nets, and consequently large quantities of fish escape, that would have been captured had the water been less transparent.

#### NAAS RIVER.

With regard to the Naas river the pack amounted approximately to the same as last season, the same number of canneries were in operation.

The spring salmon run was good, but the sockeye show a slight decrease.

I consider a snag scow would assist the fishermen materially by removing the larger

snags in the principal drifts.

I can only reiterate the remarks made in former reports, that until the obstructions at the head waters of the Naas, at the mouth of the Majiarden lake are removed, we shall see no perceptible or permanent improvement in the sockeye run on this river.

#### NORTH COAST FISHERIES.

The statistics show an increase in these outlying canneries, which occurred at Bella Coola and Lowe inlet, the run of Cohoe at Bella Coola was extremely good, the fish being large, in first class condition and colour.

Unfortunately there was a total failure at Kimsquit river, which stream contributes considerably towards the sockeye pack of the north coast fisheries, the cause of

this failure which has been personally investigated by me is as follows:-

The spawning grounds of the Kimsquit river, which are frequented principally by sockeye, are located to a large extent in the river and tributary creek although there is a large lake at the headquarters of river it provides no spawning grounds, as the water is deep, the banks being rocky and steep. The salmon as I have said consequently

spawn in the river and tributary creeks, which run through low swampy ground frequented by beaver, and are subject to overflow caused by heavy rains. Should these rains occur when the salmon are ascending for the purposes of spawning, they leave the main channel and creeks and spawn in the overflowed gravel banks, the water quickly recedes leaving them and their spawn high and dry. This combination of climatic conditions occurs very rarely, only once before has it been known, within the last twenty years.

There are some log-jams in the river, which the department are contemplating removing, when this is accomplished I consider it will materially reduce the chances of the river overflowing its banks. The Indians that frequent this river are few in num-

ber, and comparatively speaking do little harm to the fisheries.

#### BELLA COOLA AND SALMON RIVERS.

During last September, 1 made a tour of inspection of the head waters of the Bella Coola and Salmon rivers; my exhaustive report has been forwarded to the department. Taking these fisheries as a whole I found the conditions most satisfactory, with the exception of one log-jam in the Bella Coola river and an obstruction on the Salmon river, which I was unable to inspect, but which will be inspected this coming fall. I consider the Indians do little harm in these waters, but they were given instructions in connection with the taking of their winter supply of food.

I made certain recommendations to the department which I believe will be carried out. The remarks in my last year's report on this subject hold good for this season, very little change occurred in these fisheries, approximately the same amount of fish

were salted and the same methods employed.

#### HALIBÚT.

Although there are extensive halibut banks in my district and very large catches are made, they are all taken to Vancouver and exported from that port, only a small quantity being exported direct from my district, therefore the statistical returns are forwarded to the department of Inspector Sword in his report.

The protection of this valuable commercial product, I am pleased to see is engaging the attention of the department. It is an admitted fact, by all who are competent

to judge that our halibut banks are being rapidly depleted.

I must reiterate my remarks in my last year's report in connection with our deep sea fisheries, and beg to call the attention of the department to them, also the protection of our clam beds is another matter that should receive immediate attention.

I am, sir, your obedient servant,

#### JOHN T. WILLIAMS,

Inspector of Fisheries.

# EXTRACTS MADE FROM A REPORT OF OFFICER HELGESON AT ESSINGTON, B.C., DATED THE OCTOBER 19, 1907.

I herewith submit the annual report of my work and observations during the season of 1907, for the upper part of District No. 2 committed to my charge, comprising the Skeena from Lakelse north to its head waters including Copper, Kitwangah, Kituakla, Bulkley, Kispiax, Blackwater, Babine rivers, and their tributaries.

I am pleased to say that there has been a good run of salmon this season and the Indians who fished have caught a sufficient quantity for themselves and families, and

seem to be well satisfied.

On the 4th July, I attended a meeting of the Indians. Father Cocoola and the Indian Agent were also present. In the meeting I took the Indians severely to task for the very unfriendly manner in which they were treating the hatchery people and endeavoured to shame them. I told them of the great benefit the hatchery people would be to them and the necessity for them to have their good will, and Father Cocoola did the same in unmistakable language, but I regret to say it had no effect, finally the Indians condescended to rent a big lumbering bateau they had to carry cordwood to the village. With that clumsy heavy thing we circumnavigated the 110 mile lake, all but a few miles, and finally located a hatchery site on Salmon creek, on the east side of Babine lake. On the 19th we reached Babine village, the sockeye were not running yet. I distributed the nets and left Babine, and reached Hazelton on the 15th. On August 3rd, I inspected the contract work done during winter on Copper river obstruction, prepared a report on same, and forwarded it to the inspector.

There has been no communication with this place since, as all the three river boats are either lost or come to grief, lately a canoe swamped and five men were drowned. When inspecting the Copper river obstruction, I concluded that the contract though completed had not gone far enough, as the place is still very steep and the water very turbulent, and I reported accordingly, though I considered some of the strongest fish might reach the spawning grounds, and to determine this, for certain, I sent Guardian Norrie on the 4th September over to the head of Copper river, knowing if any of the sockeye did get up, they would reach the upper parts by the time he would reach there. I instructed him particularly that if he found salmon, to see if there was a fair quantity of females amongst them. He returned on the 13th and reported having seen hundreds of sockeyes male and female fairly divided, all busy spawning, so after all the contract has had the desired effect, and the sum the department kindly expended has furnished the Skeena with a great auxiliary feeder, which had been unproductive for the space of 20 years.

I hereby recommend that the department forbid all salmon fishing on Copper river for the next four years, that can be done without working any hardship or disappointment to any one. It would be a pity to do otherwise, if the river is exempt for

that period, it would be properly stocked with salmon.

Guardian Frank, on Beat No. 1, reports that there has been no attempt at Barricading, the close season has been well observed, the Indians having captured sufficient quantity for themselves and families, and seem to be well satisfied.

Stewart Norrie, on Beat No. 2, states great work has been done both in exploring and patrolling. After his first trip up the Bulkley I sent him up Kispiax river to explore where he had been unable to reach before, where he found a very extensive country with numerous large and small lakes and a vast area of spawning ground, this was before the salmon began to run. He was told by Indians that every known variety of salmon spawn in the streams there in large numbers. He described the scenery there as very grand, beautiful clear mountain water, clean pebbly bottom, and large shoals of excellent trout were seen, so there can be little doubt but that any true disciple of Isaac Walton would rejoice at the situation.

G. Spinning, on Beat No 3, reports that the Indians are jubilant, having received a sufficient quantity of splendid sockeye net with which they have caught what salmon they need, in fact some of them have quit fishing some time ago, not wishing more. They have also received a good quantity of the best of trout nets, twine, lines, Norwegian ice cutters, so that they can work the nets under the ice in winter, and get fresh fish whenever they choose. Thorough instructions how to work the nets has been given them.

It will be of interest to give the extent of country we have to contend with. H. Frank, on Beat No. 1, Skeena river from Lakelse to Hazelton, distance 120 miles, by canoe down stream, by steamers up stream, this does not include the travel up and down the numerous salmon streams.

G. Spenning, on Beat No. 3, Babine lake, distance from old fish town to head of big lake, 118 miles, to make one round of his beat, has to travel in his canoe, 236 miles

S. Norrie, on Beat No. 2, has made the following trips this season :-

Trip to	Morrice town and back	70	miles.
н	Hugglegate Village	9	11
11	Sha-gun-jah Creek	18	11
11	Kispiax and La-ka-dah	130	11
11	Glen Vowel Skeena	10	11
11	Morrice town	70	11
11	Kispiax River	16	11
11	Hugglegate	9	11
11	Blackwater Lake	240	11
11	Head of Copper River	130	11
11	Sha-gun-jah Creek	47	11
	Total distance travelled by Norrie	749	

Fourty-four miles of the above distance were done on horse back, 705 miles by walking, leading the government horse, packing provisions, blankets, &c. The above distance does not include the many journeys off the trail to look for fish, rock-falls, log-jams, &c.

It will readily be seen by the above, that our work has greatly increased by the upper part of Copper river and the immense country to be traversed up the Kispiax valley, in fact it will be impossible to carry on the business successfully in the future with the help at hand. I therefore trust that the department will give us another guardian on Beat No. 2 next season. There being no hope of any steamer coming up the Skeena to Hazelton this fall, so I, with the help of Guardian Norrie, built a boat in which we made a successful trip down the Skeena to Essington, which we reached on the 17th, having made the run in three days and a half.

### District No. 3.

NANAIMO, B.C., May 1, 1908.

To the Dominion Commissioner of Fisheries, Ottawa.

Sir,—I have the honour to inclose my statistical report of the fisheries for District

No. 3, of British Columbia, for the year ending March 31, 1908.

In some of the branches of our fisheries the development has been very satisfactory during the past year, this is especially noticeable in the expansion of the herring industry.

#### SALMON.

There was a marked increase in smoked salmon, also in the salmon pack; one firm putting up nearly 30,000 cases. A large number of spring salmon were taken in the traps, and the demand for this valuable fish is steadily growing. A new cannery was operated at Knight Inlet for the first time and therefore new waters explored.

#### HALIBUT.

The halibut fishing received more attention during the past season, and the returns show an increase in the catch. A vessel was built at Victoria and engaged in the halibut fishing on the west coast of Vancouver Island. As there are extensive halibut banks along the west coast there is every reason to expect that this branch of the fisheries will develop rapidly.

#### HERRING.

The herring industry continues to grow, but last season was the banner one, the catch being more than double that of the previous season. The herring came into the harbours in as great numbers as in former seasons; but were much larger, especially was this the case at Nanaimo.

#### WHALING.

Three factories were in full operation last season. The new one at Pages Lagoon was completed and began operations early in the autumn. This factory is very complete and is excellently situated; but the number of whales taken in the Gulf of Georgia was disappointing, and as the company was anxious to operate the station at Pages Lagoon, dog-fish were procured in large numbers from the fishermen, and converted into fertilizer. As whales are, however, abundant all along the west coast of Vancouver Island the industry has had a very successful year.

#### SEALING.

The Victoria Sealing Company despatched sixteen vessels to the Behring sea. The catch is the smallest for many years. As will be seen by the report the number of sea otter was far in advance of any previous year, and as they are very valuable they make quite an addition to the returns of the seal hunters. During the past year very few Indians engaged in sealing along the west coast of Vancouver Island.

#### BIOLOGICAL STATION.

The Biological Station at Departure bay has been completed and it is expected that there will be an opportunity for scientific research work, in connection with the habits and methods of the various forms of marine life.

#### PATROL.

The patrol boat now under construction at Nanaimo, is about completed and will be a great acquisition to the present patrol service, especially in the protection of the large and important fishing areas between Vancouver Island and the mainland.

I have the honour to be, sir,

Your obedient servant,

EDWARD G. TAYLOR,

Inspector of Fisheries.

8-9 EDWARD VII., A. 1909 RECAPITULATION DISTRICT, No. 1, BRITISH COLUMBIA, 1907-08.

Kinds of Fish.	Quantity.	Price.	Value.
	,	\$ cts.	*
Salmon, canned (in cases of 48 lb.)	163,116	6 00	978,696 0
dry salted	6,500,000	0 05	325,000 0
" dried (Indian con.)	800,000	0 05	40,000 0
" smoked	120,000	0 10	12,000 0
" fresh and frozen	3,600,000	0 05	180,000 0
Sturgeon	100,000	0 05	5,000 0
Halibut	12,914,925	0 05	645,746 2
Herring, fresh and salted	70,000	0 01	700 0
" smoked	9,000	0 10	900 00
Oulachans, fresh	15,000	0 05	750 00
" saltedbrls.	35	10 00	350 00
" smoked 1b.	1,000	0 10	100 00
Smelts	250,000	0 05	12,500 00
Trout	170,000	0 10	17,000 00
Cod	350,000	0 05	17,500 00
Shad	10,000	0 05	500 00
Mixed fish	-80,000	0 05	4,000 00
Fish oilbrls.	233	9 00	2,097 00
Guanotons.	$1,294\frac{1}{2}$	25 00	32,362 50
Oysters, clams, crabs and other fish (not included in above)			10,000 00
Total value	.		2,285,201 75

# CAPITAL INVESTED IN BRITISH COLUMBIA FISHERIES, DISTRICT No. 1, 1907,

Description of Property.	Number.	Value.	Total.
		8	\$
Canneries, wharfs, &c	35*	911,000	
Steamers and gasoline boats including 4 chartered	18	111,700	
Steamers in halibut trade	5	260,000	
Dories and gear		28,000	
Boats	2,700	162,000	
Gill and seine nets (fathoms)	350,000	263,500	
Trawls and lines		8,000	
Scows	150	30,000	
Cold storage plants	3	135,000	
Oil factories	2	45,000	
Salteries	5	7,500	
			1,961,700
EMPLOYEES IN FISHERIES.	1	Number.	Total.
Salmon fishermen		3,450	
On vessels (including 187 in halibut fishing)		259	
In canneries		1,400	
TH Commerce			5,109

<sup>\*</sup> Only 19 of the adove were operated.

8-9 EDWARD VII., A. 1909 BRITISH COLUMBIA SALMON PACK, DISTRICT No. 1, 1907.

Name of Cannery,	Owners or Agents.	Sockeye	Cohoe,	Springs.	Hump- backs and dog salmon.	Totals.
		Cases.	Cases.	Cases.	Cases.	Cases.
Ewen's Brunswick Imperial Terra Nova	B. C. Packers' Association.	23,956	12,033	1,682	12,115	49,786
British America Phœnix	A. B. C. Packing Co	8,487	3,621	259	13,607	25,974
Richmond	Todd & Sons	5,000 3,740 3,440	4,500 2,808	24 469	9,800 1,037 1,585	19,300 4,801 8,302
Star. Vancouver.	Canadian Canning Co	5,902		145	18	6,065
Brunswick Steveston Canning Co Great West Packing Co St. Mungo Canning Co Great Northern Canning Co. Unique.	Northern Canning Co. C. S. Windsor. J. J. Mulhall	1,556	3,300 445 6,547 284 224 2,000	95 243 500 588	4,408 3,751 4,819 12,248	1,408 4,600 6,652 13,228 6,828 12,472 3,700
		59,815	35,766	4,005	63,530	163,116

### BRITISH COLUMBIA SALMON PACK, 1907—(CASES)—DISTRICT No. 2 OR NORTHERN DISTRICT OF BRITISH COLUMBIA.

Name of Cannery.	Location.	Sockeye, 48 lb. cases.	Cohoe, 48 lb. cases.	Spring, 48 lb. cases.	Hump- back, 48 lb. cases.	Cannery Totals.	District Totals.
		Cases.	Cases.	Cases.	Cases.	Cases.	Cases.
Balmoral )	Skeena	19,912	4,121	1 693	6,320	32,046	
Cunningham	0	16,098	1,645	2,931	5,249	25,923	
North Facilic North Facilic Dominion. Inverness. Oceanic. Claxton Skeena River Com. Cassiar. Alexandra. Carlisle Village Island		7,039 8,400 10,783 16,027 7,549 10,021 1,966 10,618 200	619 800 952 1,930 1,700 1,121 1,530 829 15	800 1,776 1,710 253 528 	1,354 2,300 3,588 1,869 628 1,750 500 1,659	9,012 12,300 17,099 21,536 10,130 13,420 3,996 13,793 260	
Totals		108,613	15,262	10,413	25,227	159,515	159,515
Brunswick Wadhams. Good Hope. Rivers Inlet Beaver Strathcona Kildela.	ft	30,457 12,323 12,669 12,200 10,466 9,759	229 3,200 1,543	134 59 61 196	700	30,659 	
Totals		87,874	5,040	450	700	94,064	94,064
Naas Harbour Arrandale Port Nelson	Naas	5,853 6,016 5,944	2,307 2,340 1,446	176 245 867	1,251 2,636 2,070	9,587 11,237 10,327	
Totals		17,813	6,093	1,288	5,957	31,151	31,151
Lowe Inlet	North Coast	7,400 853 1,971 1,372 3,750 10,000	1,216 1,969 1,124 9 6,657 1,200 827	38 1,971 300	348 2,861 545	8,964 2,822 5,956 1,419 12,923 11,5 0 1,004	
Totals		25,523	13,002	2,309	3,754	44,588	44,588
Skeena		108,613 87,874 17,813 25,523	15,622 5,040 6,093 13,002	10,413 450 1,288 2,309	25,227 700 5,957 3,754	159,515 94,064 31,151 44,588	
Totals of each variety		239,823	39,397	14,460	35,638	329,318	329,318

Grand Total......329,318 cases.

BRITISH COLUMBIA FISHERIES, 1907—DISTRICT No. 2.

		Number		τ	7	8	₽	g		
F FISH	10c. lb.	Salmon, salted,		40,000	3,000		50,000 ↔		153,000	15,300
s and Quantities of and Fish Products.	, 5c. lb.	Salmon, dry salu		196,000	500,000	75,000	120,000	.90,000	981,000	49,050
D QUAN Fish E	o bris.	Salmon, salt, \$10		09	40	08	400	400	086	0,800
KINDS AND QUANTITIES OF AND FISH PRODUCTS.	·(88	Salmon, (\$6 case		F 450	43,584	1,004	329,318	1,975,908		
	w]	Value,	66	:	:	:		200	1 :	200
	Trawl Lines.	Fathoms.		:	:	:	:	600 12,000	12,000	
ERIALS	les.	.9ulaV	₩	350	500	:	5,800	009		7,250
G MAT	Seines	Fathoms.		200	100		2,000	-200	2,500	
FISHING MATERIALS.	Yets.	Value,	¢₽	96,000	64, 485	20,645	15,100	:		196,230
	Gill Nets.	Fathoms,		188,500		37,970	31,800	:	418,270	
		Men.	*	2,536	1,830	564	192	6.2	5,773	
z;	Boats,	Value.	<b>⊕</b>	78,591	38,622	15,150	8,060	1,000		141,413
Vessels, Boats, &c.		Number.		821	825	141	177	12	1,976	:
ß, Be		Men.		69	40	10	36	12	167	:
VESSEI	Vessels.	.salue.	<b>%</b>	71,750	38,000	5,850	27,500	4,000		147,100
	Ve	Gross Tons.		1,000	400	200	400	100	2,100	
		Number.		13	00	4	12	60	46	:
	December M. 6	DISTRICT NO. Z.		keena	ivers Inlet	aas River	4 North Coast	5 Q. C. Islands	Totals.	Values

\* Including all Cannery employees.

| Number.

SESSIONAL PAPER No. 22

	Number.		-	63	600	4	10				
Annual of the latest t	TOTAL VALUE OF ALL FISH.	<b>€</b>	1,121,578	591,729	240,491 3	287,204	44,051		2,285,053	50,000	\$2,335,053
1	Canned clams, \$4.80 case.		:		:	:	1,800	1,800	8,640		:
	Fish Oil, 35c. gall.		1,300	200	700	8,000	7,750	18,250	6,387		
	Hair seal skins, 25c. lb.		300	400	200	009	300	1,800	450		
	Mixed, 5c. 1b.		6,000 10,000	2,000	6,000	10,000	40,000	68,000	3,400		:
2—Continued.	Trout, 10c. lb.		6,000	1,000	800	8,000	2.000	17,800	1,780		:
-Cont	Oulachon, smoked, 5c.	_	800	:	4,000	3,000	:	7,800	780	00	
No. 2-	Oulachon, salt, \$10 brl.		70	:	300	130		200	5,000	ove \$50,00	Grand total
IBIA FISHERIES, 1907—No. 2—Continue	Odlachon, fresh, 5c. lb.		10,000	:	400,000			410,000	20,500	Estimate of Fish not included in above \$50,000	Gr
RIES,	Herring, smoked, 10c.		3,500	:	006		8,000	12,400	1,240	not includ	
FISHE	Herring, salt and fresh, Ic. lb.		5,000	4,000	3,000	100,000	000,09	172,000	1,720	of Fish r	
IBIA KINDS	Halibut, 5c. lb.		400,000	4,000	100,000	70,000	200,000	774,000	38,700	Estimate	
COLUMBIA	Salmon in tierces,* mild, cured.		666	:	168	:	:	1,167	79,930		
BRITISH	Salmon, froxen, 5½c. lb.		.037,785		:	:		1037,785	52,228		
BRI	Salmon, fresh, 5c. lb.		160,200 1037,785	18,600	9,000	7,000	90,000	284,800 1	14,240		
	Number.  Districts No. 2.		Skeena	2 Rivers Inlet	3 Naas River	North Coast	5 Q. C. Islands	Totals	Values		

22-151

\* A tierce is 760 lb.

### RECAPITULATION

Of Yield and Value of Fisheries in Northern British Columbia, for Year 1907, District No. 2.

Kinds of Fish.	Quantity.	Price.	Value.
Salmon, canned       .48 lb. cases         " salted       brls.         " dry salted       lb.         " smoked       "         " fresh       "         " mild cured       tierces         Halibut       lb.         Herring, fresh and salted       "         " smoked       "         Oulachon, fresh       "         " salted       brls.         " smoked       lb.         Trout       "         Mixed       "         Hair seals       skins.         Fish oil       galls.         Canned clams       cases.         Estimate of fish not included in above       Total	329,318 980 981,000 153,000 284,800 1,037,785 1,147 774,000 172,000 12,400 410,000 500 7,800 17,800 68,000 1,800 1,800 18,250 1,800	\$ cts.  6 00 10 00 0 05 0 10 0 05 0 05 0 01 0 05 0 01 0 10 0 05 10 00 0 10 0 1	\$ 1,975,908 9,800 49,050 15,300 14,240 52,228 79,930 38,700 1,720 1,240 20,500 5,000 780 1,780 3,400 450 6,387 8,640 50,000 2,335,053

# Recapitulation of the Fishing Material used in British Columbia, 1907, District No. 2.

Description of Property.	Number.	Value.	Total Value.
Fisheries— Canneries, wharfs, &c Vessels Boats, scows and camp scows Gill and seine nets (fathoms) Trawls and lines Oil factories Salteries	46 1,976 420,770	\$ 950,900 147,100 141,413 203,480 500 8,000 24,000	. \$
Total capital			1,475,393
Employees in fisheries— Fishermen and cannery workers Employed in vessels	5,773 167		
Total	5,940		

SESSIONAL PAPER No. 22

RETURN showing the Number and Value of Vessels and Boats, Nets, &c., also the kinds of Fish caught in British Columbia for the Year ending March 31, 1908. BRITISH COLUMBIA-DISTRICT No. 3, OR VANCOUVER ISLAND.

		Number.			67	ಣ	4	ಸ	9	<u>L-</u>	00	G.		
		Salmon fresh,		224,000	195,200	233,600	26,000	29,400	6,100	5,300	6,700	10,400	736,700	73,670
KINDS OF FISH.		Salmon smoked,		49,900	33,000	20,100	13,000	9,600	2,400	2,900	4,000	10,000	144,900	14,490
	'pa	Salmon dry-salte		494,500	258,000	24,525 1,687,000	6,580 1,452,500	40,200	45,400	78,900	:	514,000	49,832 4,570,500	228,525
	cases,	Salmon canned No.		:	:	24,525 1,	6,580	6,737		3,900	:	8,091	49,832 4	323,908
	Lines.	Value.	40	1,400	450	3,200	375	200	525	400	400	1,500		8,750
	Trap Nets.	Value.	<b>9</b> €			340,000	:	10,000	:	:	:			350,000
IALS	Trap	Number.		:	:	30	:	-	:	1	1	:	35	
FISHING MATERIALS	20 O	Value,	<b>6</b>	6,900	1,200	092	4,200	3,450	1,200	3,750	2,750	6,900		31,100
ISHING	Seines	Fathoms.		4,600	800	200	2,800	2,300	800	2,500	1,500	4,600	20,400	
Ħ	Gill Nets.	Value.	₩.	4,960	1,440	1,680	2,400	2,480	1,680	096	1,160	864		17.624
		Esthoms.		6,200	1,800	2,100	3,000	3,100	2,100	1,200	1,450	1,080	22,030	
	İ	Men.		315	0.2	06	100	140	65	89	62	98	966	
SOATS.	Boats.	Value.	€€	6,560	2,100	2,460	2,400	2,580	1,920	1,200	1,140	2,040		22.200
ND E		Number.		106	35	#	40	43	32	20	1.5	34	370	
ILS A		Men.		26	9	58	10	90	6	9	4	00	135	
VESSELS AND BOATS.	Vessels.	Value.	€/9	24,500	4,000	22,800	15,000	14,500	6,500	3,500	4,000	5,500		100,300
		Number.		9		17		22	6.1	<del>-</del>	-	4	36	OF:
		ncrs.		:								nland	<u>s</u>	Values
		DISTRICTS.		Nanaimo	2 Cowiehan	3 Victoria	4.Clayaquot	5 Alberni	6 Alert Bay	7 Quathiaska	8 Coniox	9 West Coast, Mainland	Totals	Value
		Number.	1	-	63	9	4	10	9	[-	00	6		

5,050 00 95,300 00 107,940 00 12,558 00

831,285 00

Grand total

RETURN showing the Quantity and Value of Fish, &c., in British Columbia, District No. 3--Concluded.

	Number.		6.1	က	41	20	9	<u></u>	∞	<u>م</u>			
	TOTAL VALUE OF ALL FISH AND PRODUCTS.	\$ cts. 237,565 00	24,303 00	23,240 00	7,022 50	6,147 50	2 659 00	2,264 00	6,421 50	8,966 50		318,589 00	291,848 00
	Crabs, doz.	2,000	092	2,100	250	040	220	180	470	490	6,700	3,350	\$207,751
	Oysters, sacks, (125 lb. each).	450	230	480	06	45	80	20	160	125	1,710	5,985	<b>ĕ</b>
	Clams, sacks, (125 lb. each).	1,350	2,750	450	1,180	1,050	220	170	1,850	880	9,900	9,900	
	Fish oil, galls.	48,400	12,580	6,400	7,800	7,400	1,440	1,480	3,880	2,020	91,400	31,990	
400	Hair seals, No.	180	400	540	420	550	300	268	446	256	3,360	2,520	
	Mixed fish, lb.	145,000	67,000	110,500	15,400	10,500	9,100	8,600	10,40	9,000	385,500	19,275	orill bono
FISH.	Cod, 1b.	233,000	120,000	15,000	7,000	5,000	3,000	4,000	7,400	4,500	398,900	23,934	Whale oil
KINDS OF	Trout, lb.	3,000	4,500	4,000	2,500	2,000	1,500	200	3,000	3,500	24,500	2,450	Whale oil
A	Ouls, hon, fresh and salted, ib.	200	800	2,500	650	450	200	300	700	006	7,50	375	
The state of the s	Smelts, lb.		51,000	154,500	:		2,200	1,500	2,500	2,000	213,700	10,685	
the state of the s	Herring, smoked, lb.	70,000	20,000	12,000	6,000	4,500	1,500	1,000	3,800	52,000	170,800	17,080	
	Herring, fresh and salted, Ib.	18,800,000	8,000	154,000	28,500	32,000	25,000	20,000	28,000	9,000	19,104,500	191,045	
	Halibut, fresh,	133,400	127,200	159,100	36,200	25,000	15,500	2,200	92,000	25,200	615,800	30,790	
	Districts.	Nanaimo	2 Cowichan	3 Victoria	d Clayoquot	5 Alberni	6 Alert Bay	7 Quathiaska	8 Comox	West Coast, Mainland	Totals	Values	
	Number.	-	63	9	4	10	9	L-	00	G.			

Whale oil \$207,751 Whale fertilizer, gill, bone, &c \$4,097 Shrimps and prawns \$2,450 Abelonies and mussels \$2,600 Estimate of fish not included Fur seals.

### RECAPITULATION

OF the Yield and Value of the Fisheries of District No. 3, British Columbia.

Kinds of Fish.	Quantity.	Price.	Value.	
Salmon, canned	49,832 4,570 500 144,900 736,700 615,800 19,104,500 213,700 7,500 24,500 398,900 385,500 3,360 91,400 9,900 1,710 6,700	\$ cts. 6 50 0 05 0 10 0 10 0 10 0 05 0 01 0 10 0 05 0 05	\$ 323,908 228,525 14,490 73,670 30,790 191,045 17,080 10,685 23,934 19,275 2,520 31,990 9,900 5,985 3,350 291,×48	
Shrimps and prawns Abelonies and mussels Estimate of fish not included above. Fur seal skins. No. Otter skins	5,397 38	20 00 330 48	2,450 2,600 95,300 107,940 12,558	
Total			1,502,668	

8-9 EDWARD VII., A. 1909

STATEMENT of the Capital invested in District No. 3, British Columbia Fisheries, 1907.

Description of Property.	Number.	Values.	Totals.
Canneries, wharfs, &c	36 370 42,430 35 3 19 40	\$ 108,000 100,300 22,200 48,724 350,000 8,750 246,646 47,500 18,000 13,000	\$
Fur sealing— Vessels. Boats and canoes Guns and equipments.	36	348,358 2,946 16,346	963,126
Capital, total			1,330,770
Employees in Fisheries.		Number.	Totals.
Fishermen and cannery employees		1,650	1,78
Sailors and hunters in fur sealing — White men Indians		197 220	417
Total		-	2,20

# BRITISH COLUMBIA SEALING REPORT, 1907-08.

SIUNAL	PAPER N	lo. 22	
kins.	Offer s	38	
anista b	Brande		
Totale	TOTALD	21 446 446 393 393 228 4418 418 1133 281 1101 101 631 631 638 648 648 648	157
г Венк-	Females	157 191 151 167 128 82 82 248 248 248 248 1,351	
EASTERN ING SEA	Males.	287 286 1115 59 22 22 22 114 172 241 1,507	
OUTSIDE AWARD	Females	224	
	Males.	132 132 Seized. 21	
	Females	212 67 103 94 94 94 94 95 96 113 88 119 95 95 96 119 97 97 97 97 97 97 97 97 97 97 97 97 97	
B. C. CAT	Males.	252 600 600 1125 775 774 774 807 1,008	coast)
	Canoes.	111 112 112 113 114 114 114 1105	ig the
	Bosts.	© 3 ממטטטטטטטטטטטטטטטטטטטטטטטטטטטטטטטטטט	oes alor
WS.	Indians.	253 264 27 28 29 31 31	ns in cano
CRE	Whites.	197 197 197 197 197 198 88 88 88 88 88 88 88 88 88 88 88 88 8	ual India
E		63 86 994 994 995 60 60 60 77 77 77 77 64 99 99 1,085	ndivid
7	Washers.	Wm. Munro J. G. Searle Wm. Heater Geo. Heater A. K. St. Clare A. B. Whidden B. M. Balcom John Christian John Christian V. Hitty. V. Jackobson, H. F. Brown H. Blakstad John Haan	Indian catch (by individual Indians in canoes along the coast)
.oV ,	License,		
		1 Casco. 2 Dota Sieward. 4 Markland. 5 Vera. 6 Vetcoria. 7 Ida btta. 8 C. C. Cox. 9 Allice J. Alger. 10 Libbic (spring). 11 E. B. Marwin (Cape Horn. 12 Ella G. 13 Eva Marie. 14 Jessie. 15 Thomas F. Bayard.	
	CREWS.  CATCH OUTSIDE FASTERN BEHR- CATCH OUTSIDE FASTERN BEHR- R GATCH OUTSIDE FASTERN BEHR- R	B. C. Coast Catch Outside Eastern Behr. Catch. Area of Award ins Sea Catch.  Males. Females Males. Females Males. Females Gotter Skins.	Vessels.   2

# SUMMARY.

Indian catch (by individual Indians in canoes along the coast) ...... Total catch of Canadian vessels,

5,397

1,98	4.8%	5,39
British Columbia coast catch. British Columbia Indians	L L	Otter Total seal

34 558 57 58 58 38

# RECAPITULATION

OF the Yield and Value of all British Columbia Fisheries for the Year 1907-08.

Kinds of Fish.	Quantity.	Rate.	Value.	Total Value.
		\$ cts.	. \$	\$ cts.
Salmon, cans	542,266		3,278,512	
ıı fresh lb.	5,659,285		320,138	
ıı smoked ıı	417,900	0 10	41,790	
" salted, dry	12,851,500	0 05	642,575	
n n brls.	980	10 00	9,800	
mild cured lb.	799,300	0 10	79,930	
				4,372,745 00
Halibut 11	14,304,725	0 05		715,236 25
Herring, fresh and salted	19,346,500	0 01	193,465	
" smoked "	192,200	0 10	19,220	
				212,685 00
Oulachons, fresh and salted	539,500		26,975	
" smoked "	8,800	0 10	880	07 055 00
7 1	400 500	0.0~		27,855 00
Smelts	463,700	0 05		23,185 00
Frout	212.300			21,230 00 41,434 00
God "	$744,900 \\ 10,000$	0 05		500 00
Shad	100.000	0 05		5,000 00
Sturgeon" Mixed fish"	533,500	0 05		26,675 00
Dysters sacks.	1,710	3 50		5,985 00
Clams	9,900	1 00	9,900	0,000 00
cases.	1,800	4 80	8,640	
ounifed,,, ,, ouscore	1,000	1 00	0,010	18,540 00
Crabs, mussels, &c				8,400 00
				155,300 00
				291,848 00
Fish oil galls.	116,640			40,474 00
Fur, seal skins No.	5,397			107,940 00
Hair. seal skins No.	5,160			2,970 00
Sea otter skins	38			12,558 00
Fish, guano tons.	$1,294\frac{1}{2}$	25 00		32,362 50
TI 1 1 1 1007		•	-	C 100 000 75
Total for 1907				6,122,922 75
. 1906				7,003,347 00
Decrease				880,424 25

# RECAPITULATION

Of Fishing Materials in the whole of British Columbia, in the Year 1907-8.

Description.	Number.	Value.	Total.
		\$	\$
Fishing vessels and steamers	5,046	619,100 325,613 28,000	972,713
Fathoms of gill-nets and seines		515,704 17,250 350,000	882,954
Salmon canneries, wharfs, &c Salteries for fish Oil factories Cold storage for fish, &c Fishing scows Whaling stations	75 30 7 3 190 3	1,969,900 79,000 66,000 135,000 48,000 246,646	2,544,546
Fur Seal Fleet.			-,,-
Vessels Boats and canoes Equipment.	165	348,358 2,946 16,346	367,650
Total			4,767,86

STATEMENT of Employees in the Fisheries of all British Columbia, 1907-8.

Men.	Number.	Total.
In fishing vessels	561 12,273	12,834
Seal hunters— Whitemen	197 220	417
Total		13,251

# APPENDIX No. 12.

# FISHERIES REPORT

BY CAPTAIN BERNIER, ON HIS VISIT IN THE NORTHERN REGION IN STEAMER ARCTIC IN 1906–1907.

List of the whaling licenses that were issued to the Scotch whalers, during the expedition to Arctic regions and Hudson Strait, in 1906-7.

Whalers.	Licenses.	Year for.
'Diana'. 'Balæna'. 'Eclipse'. 'Morning'. 'Albert'. 'Windward'' lost on June 26, 1907. 'Scotia' and 'Snowdrop' were not in our neighbourhood, and we did not collect licenses from them.	2 2 2	1906-7 1906-7 1906-7 1906-7 1906-7

I am very sorry to have to report that on the 26th of June the steam whaler Windward, from Dundee, Scotland, was totally lost on the Carey Islands. Captain Cooney and his crew had to sail from the place of the wreck to Pond's Inlet, in the ship's lifeboats. They were taken on board of another Dundee whaler, in Pond's Inlet.

 No licenses were collected from Kekerton and Blacklead stations for the following reason:—

On August 28, being outside of Kekerton, in Cumberland Gulf, I sent the chief officer on shore to communicate with the agent of that station, Mr. W. F. Milne. This officer returned on board with the news that Mr. Milne, the agent of the station, had died, on the 13th of the same month, under suspicious circumstances. I sent Doctor Pepin with some officers ashore to hold an inquest into this death. The result of this inquest proved that the late agent had shot himself with a gun in a moment of despair caused by nostalgia, as shown by some letters written by him some time before committing the deed, and which had been left on his desk.

We also landed at Blacklead, on the 30th of August, but we found no agent at this place. He had left the year previous, as we learned from the few natives at this station; there were no representatives from whom we could collect the license. We proceeded and we arrived at Port Burwell on September 2.

# WHALING.

Tabulated statement of information concerning the whale fishery in Baffin Bay and in Hudson Bay.

# BRITISH WHALING FLEET.\*

Year.	Steamer.	Sail.	Whales:	Oil.	Bone.
		1		Tons.	Cwt.
2**	11	12	65	742	710
965 966	15	11	81	848	933
sirj	17	îî	24	228	60
SS	18	12	134	1,228	1,164
9	16	10	22	266	207
50	14	8	79	962	1,111
571	15	6	152	1,348	1,544
72	17	5	138	1,392	1,486
.73	18	4	172	1,426	1,475
574	16	3	190	1,662	1,680
575	18	2	98	975	970 $1.132$
576	17	3 .	82	1,115	1,152
577	13		80	999	000
881	11		48	514	498
882	9		79	670	560
583	6		17	524	190
584	9		79	755	780 200
\$85	12		28	350 375	200
886	8		15	496	140
Ni ,	8		6	308	4:
888	7 3		8	125	110
889	5		11	403	268
×90	5	1,	6	167	70
891	5	1	7	228	78
\$92 \$93	4		30	391	410
894	5		15	218	250
945	5		3	233	30
896	3		3	60	18
97	3		8	102	110
893	4	,	8	235	10
899	7		26	419	330
900	7		17	290 260	230 16
901	6		15 13	212	18
302	6		14	145	17
903	6 6		11	110	10
904	10		23	2901	33
905	9		7	111	7
906	8		3	97	3
907					
0 vrs.	382	87	.1,817	$21,244\frac{1}{2}$	19,05

<sup>\*</sup> The returns from 1865 to 1877, inclusive, are from the report of the United States Consul at Dundee, 1877. The returns from 1881 to 1904 have been furnished by Capt. W. F. Milne, of the British whaler Eclipse. The returns from 1904 to 1907, inclusive, have been prepared by Capt. J. E. Bernier, Commander of the C. G. S. Arctic.

The details of the season's catch for 1907 are as follows:-

Ships.	Black whales.	White whales.	Wal- ruses.	Seals.	Bears.	Foxes.	Oil.	Bone.
				-			Tons.	Cwt.
'Active'		32	374	185	65	650	28	
'Diana'	1	1	13	5	33		$4\frac{1}{2}$	1
Dalæna ,,			3	. 26	43	١	1	
'Ecl pse'			13		11		$2\frac{1}{2}$	
MIOTHING	1	3	7	45	28		1	******
Snowdrop'			184	190	23	50	$10\frac{1}{2}$	
'Scotia' 'Albert'			19	10	27		$32\frac{1}{2}$	32
* Albert '			21	560	28	40	17	
* 'Windward'	• • • • • • • • • • • • • • • • • • • •							
	3	36	634	1,021	258	740	97	321

<sup>\*</sup> Lost on the 26th of June.

The results accruing to the work of the Dundee whaling fleet during the season of 1907 are expressively tabulated in the above statement, which has been compiled by Mr. James Mitchell, shipbroker, Dundee. The season was opened with in some cases the burden of the loss incurred by the comparative failure of the previous season to be cleared off; but the work of the past year has proved even less profitable than that of the previous one. Only three black whales, yielding an aggregate of  $32\frac{1}{2}$  cwts. of bone, were caught, and of these 2, representing 32 cwts. of the total bone produce, were taken by Captain Robertson of the Scotia. The scraps, however, compare more favourably with former catches. Calculating on the basis of the revenue in a moderately successful season, the monetary loss to the shareholders is estimated at about £50,000. The unproductiveness of the season is reflected in the scarcity of bone on the market, and the consequently rising prices. A regrettable feature of the year was the wreck of the Windward, which itself represents a large material loss to the owners.

The following returns given in tabular form will show the results of the last six seasons of Arctic fishing and trading with natives:—

		1	1	1	1	
Years.	1902.	1903.	1904.	1905.	1906.	1907.
Ships Bla: k whales White whales Walruses Seals Polar Bears Foxes Oil, (tons)	6 12 632 118 1,984 168	7 14 79 107 3,229 157 127 175	7 11 163 45 1,135 109 211 113	10 23 37 122 408 200 471 339	9 7 8 534 1,264 189 817 73	114 9 114 9 11 36 136 634 1,021 258 740 131 321

# WHALING INDUSTRY BY AMERICAN WHALERS, IN HUDSON BAY AND CUMBERLAND GULF.

The following is a short account of the whaling industry as pursued by the American whalers in Hudson Bay and Cumberland Gulf, from information received from Capt. Comer:—

1846-52. One ship yearly to Cumberland Gulf: yielding 350 tons of oil and 2.5 tons of bone.

1853-58. Five ships yearly to Cumberland Gulf: 750 tons of oil, 5.75 of bone. 1860. First two ships to winter in Hudson Bay: value of catch, \$60,000.

1863. Fourteen ships in Hudson Bay and Cumberland Gulf.

1864. Fifteen ships in Hudson Bay. 1865. Two ships in Repulse Bay.

1866. Four ships wintered in Repulse Bay.

1889. Schooner Antarctic, Capt. Gifford: no whales.

1890.

1891. Bark A. A. Tucker, New Bedford, Mass., Capt. Fisher, wintered at Marble island: 4 whales, 4,500 lb. of bone

1891. Bark Perserverance, Capt. Murray, H.B.C. Wintered at Repulse Bay: 2

whales, 1,800 lb. of bone. Returned home in 1893.

1893. Two ships: 8 whales, 18,500 lb of bone. Bark *Canton*, Capt. Fisher, New Bedford, Mass. Wintered at Depot island; returned home in 1894: 5 whales, 6,000 lb. of bone. Bark *A. A. Tucker*, Capt. West, New Bedford, Mass. Wintered at Depot Island: returned home in 1894: 3 whales, 4,500 lb. of bone.

1894. Bark *Perserverance*, Capt. Murray, H.B.C., first winter at Depot Island, second winter at Chesterfield Inlet; third winter at Repulse Bay. Catch very small:

5 whales, 2,500 lb. of bone.

1899. Bark Canton, Capt. Peel, New Bedford, Mass., wintered at Cape Fullerton; returned home in 1896: 2 whales, 2,000 lb. of bone. Bark A. A. Tucker, Capt. West, New Bedford, Mass., wintered at Cape Fullerton: 1 whale, 1,600 lb. of bone. Schooner Era, Capt. Comer, New Bedford, Mass., wintered at Cape Fullerton; returned home in 1896: 3 whales, 6,700 lb. of bone.

1896. Desdemona, Capt. Willard, New Bedford, Mass., lost before winter; crew returned home in Era: 2 whales, 2,600 lb. of bone. Platina, Capt. Mackenzie, New Bedford, Mass., wintered at Repulse Bay; returned home in 1896: 2 whales, 1,600 lb.

of bone.

1897. Bark A. A. Tucker, Capt. Nichols, New Bedford, Mass., wintered at Cape Fullerton; returned home in 1898: 1 whale, 1,750 lb. of bone. Schooner Era, Capt. Comer, New Bedford, Mass., wintered at Cape Fullerton; returned home in 1899: 16 whales, 18,000 lb. of bone. Schooner Francis Allyn, Capt Gibbons, New Bedford, Mass., wintered at Repulse Bay; returned home in 1898: 2 whales, 2,000 lb. of bone. 1898.

1899. Schooner Francis Allyn, Capt. Gibbons, New Bedford, Mass., wintered at

Cape Fullerton; returned home in 1900: 6 whales. 4,500 lb. of bone.

1900. Schooner Era, Capt. Comer, New Bedford, Mass., 1st winter at Cape Fullerton; 2nd winter at Repulse Bay; returned home in 1902: 8 whales, 8,000 lb. of bone.

1901. Schooner Francis Allyn, Capt. Santos, wintered at Depot Island, was burnt in 1902, to the south of Cape Fullerton; no whales.

1902.

1:03. Schooner Era, Capt. Comer, New Bedford, Mass., wintered at Cape Ful-

lerton: 3 whales to date; 1,800 lb. of bone.

Eight vessels have been lost at the whale fishery during the last thirty years, to the knowledge of Capt. Comer, they are: the Omay Taft, Albert Lawrence, A. E. Hanton, Ellen Rodman, Isabel, Desdemona, Francis Allyn and the Polar Star. Capt. Comer does not state that all were lost in Hudson Bay, but leads to that inference.

Since 1904 Capt. Comer has taken 7 whales, (1904-05) with the schooner Era; went home to New Bedford, Mass., where he wintered. Left New Bedford for Hudson Bay, in June, 1906, on board the schooner A. T. Gifford, to spend two years in Hudson Bay; probably in Repulse Bay; it is to my knowledge that he was there in October, 1907. He has not paid any license for the last year. No other vessels have been whaling in this inland sea this year, except the steam whaler Active.

The steam whaler *Active*, Capt. Murray, Dundee, Scotland, has visited Hudson Bay annually, since 1898, and being assisted by a large number of natives, from Savage Islands, has succeeded in capturing some whales and a goodly number of walruses.

In 1899 the Active brought out materials for a small station, which is erected on the south shore of Southampton Island. This venture was a commercial failure, and the place was abandoned in 1903. In the meanwhile the owners of the Active sent two fishing smacks to Hudson Bay, to remain in those waters, to act as tenders to steamships. One, the Ernest Williams, (1903 and 1904) has wintered in Repulse Bay, being used as a trading station; with the expectation of securing from the natives some whalebone as well as musk-ox skins and other furs. The second smack, Queen Bess, is stationed on the north shore of Hudson Strait, near Icy Cove, where her owners are working a mine for mica

The following conclusion may be drawn from the above information:—In the height of the whaling industry there were from 600 to 630 whaling vessels in active service, in the Atlantic, Pacific and Arctic oceans, hailing from the United States and from ports of the United Kingdom: now the number scarcely reaches fifty. There has not been and there cannot be a revival of this industry until there is first a renewal of the supply of whales, and at the present time there appears to be no prospect of this. As will be inferred from the above reports, this year has been a total failure in the Arctic Sea; only three whales having been caught. It must, therefore, be admitted that, at least for the present, the whaling fishery is nearly exhausted. Taking into consideration the state of things at present a closed season should now be enforced and remain so for ten to filteen years: so as to give the whale time to multiply. The whaling industry will soon be a thing of the past if no enactment is passed for its tomporary restriction

J. E. BERNIER,

Fishery Officer.

# APPENDIX No. 13

# REPORT ON FISH-BREEDING OPERATIONS IN CANADA

# 1908

REPORT OF PROFESSOR EDWARD E. PRINCE, COMMISSIONER AND GENERAL INSPECTOR OF FISHERIES FOR THE DOMINION OF CANADA.

To the Honourable L. P. BRODEUR,
Minister of Marine and Fisheries,
Ottawa.

SR,—I have the honour to submit my annual report on the fish-breeding operations carried on in the hatchery establishments conducted under the auspices of the Dominion government. In presenting my report it is my duty to again place on record the fact that the work of fish-culture has been greatly extended during the past year. No less than thirty-six fish hatcheries are now equipped and actually at work. Notwithstanding the rapid development to which I have year after year referred during the last thirteen years, and the present magnitude of the work, there is a widespread demand for its further encouragement and extension.

# EXTENSION OF FISH-HATCHING.

New hatcheries have been urgently asked for and the applications for supplies of eggs and of fry or young fish have continued to multiply. The public are alive to the great benefits of fish breeding as carried on in up-to-date and well-conducted hatcheries, and the demands being made cannot be met unless the operations be expanded not only by the erection of new institutions but by increasing the capacity and scope of the stations already established.

### CANADIAN AND UNITED STATES OPERATIONS.

Canada now occupies the leading position amongst the nations in operating thirtysix fish hatcheries, with the exception of the United States, which possess fifty-five hatcheries and sixty-four collecting or subsidiary stations. Many of the Canadian hatcheries are of very large capacity and in numerous cases have adjacent to them rearing ponds for the young fry and retaining ponds for the parent-adults, while bass, trout and lobster ponds are also operated in addition.

# TOTAL OUTPUT FROM HATCHERIES, 1907-8.

The table which follows shows the various species of fish and the total number of each kind respectively hatched and successfully planted from the different establishments operated by the department during the year.

Atlantic salmon (Salmo salar)	12,800,000
B. C. salmon	54,475,350
Speckled trout (Salvelinus fontinalis)	863,000
Salmon trout (Salvelinus namaycush)	3,476,000
Grey trout (Crustivomer namaycush)	840,000
Pickerel or Doré (Stizostedion vitreum)	41,500,000
Lake whitefish (Coregonus clupeformis)	199,025,000
Lobster (Homarus americanus)	501,000,000
Total	813,979,350

# TWENTY YEARS' PROGRESS.

The vast expansion of the system of fish-breeding in the Dominion of Canada can be realized by reference to its extent twenty years ago. At that time (1888) there were in existence twelve hatcheries as compared with thirty-six to-day, while the total output in 1888 was 88,109,000 as compared with 813,979,350 or thereabout planted from the hatcheries last season, 1907.

# ADDITIONAL PRODUCT OF FRY FROM PONDS.

The number of hatcheries has trebled, but the output of young fish has been increased in a disproportionately greater ratio, having increased nearly eightfold. Nor do these enormous figures embrace the whole of the product of the fish-breeding operations for there are several schemes being carried out each season, which there is every reason to claim, nearly double the total output recorded by the hatchery officers in the several provinces. There should be added the product of the black bass ponds, Belleville, Ontario; the brook trout ponds, Lake Lester, Quebec, and the Fourchu lobster ponds, Cape Breton.

# CAPE BRETON LOBSTER PONDS.

The department has received testimony that beneficial results have followed along the Nova Scotia shore, where for five years about 50,000 adult egg-bearing lobsters have been procured annually by a local arrangement, and retained in a privately-owned lobster pond, near Gabarouse, C.B., until the close season, when they have been liberated, and the eggs thus permitted to hatch out under undisturbed natural conditions. About a quarter of a million female parent lobsters have been saved from destruction in the local canneries and their enormous product of eggs has in this way been added to the replenishment of the coastal waters of the district.

In the department's (Fisheries) Report, 1903, pp. 224-225) I described in detail the tidal enclosure in Cape Breton, where this work is carried on each summer, and I need only add that it has been under strict and careful official supervision, and has been carried out in accordance with the department's requirements. The prevalent local opinion amongst fishermen and canners is that the scheme has maintained and greatly increased the supply of lobsters along the Nova Scotia shore referred to.

# APPLICATIONS FROM IRELAND AND NEW ZEALAND.

I received a letter from the Fisheries Department in Dublin on a proposal to experiment with the land-locked salmon eggs in waters owned by Sir Thomas Grattan Esmonde, Bart., M.P. In Mr. Cunningham's appended report the details of the shipment are given, and it is to be hoped that this fine fish may be established in Irish

waters as a result. The government of New Zealand again applied for salmon eggs from Canada and 130,000 Atlantic salmon ova were taken by Mr. C. L. Ayson for stocking certain waters at the Antipodes.

# SUCCESS OF PACIFIC SALMON IN NEW ZEALAND.

As to former shipments of Pacific salmon conjointly sent by this department and by the United States government, their success has been remarkable. In a recent letter to me, Mr. Ayson of the government salmon station, Hakataranua, New Zealand, informs me that the spring salmon or quinnat sent from British Columbia and California have become thoroughly established and are now spawning in the New Zealand rivers where they were planted. 'I have been busy collecting Quinnat salmon eggs,' Mr. Ayson writes on July 2, 'the run now being just over.' 'It will be interesting for you to know,' Mr. Ayson adds, 'of the great and also quick success of the acclimatization of this species of salmon in our waters. This year (1908) the run was extremely gratifying, over twice the number of spawning fish being taken this year that were taken in the two previous years.' It is anticipated that the valuable sockeye salmon of which the eggs from British Columbia have been planted in New Zealand, will in a season or two be also found spawning in their new habitat.

# DIFFICULTIES OVERCOME IN HATCHERIES.

It is unnecessary to refer in any detail to the work of the hatcheries in the various provinces as the Superintendent of Fish-Culture (Mr. F. H. Cunningham) furnishes full information in his report and the various hatchery officers give in their own reports all the details; but I cannot refrain from pointing out how great is the credit due to such officers as are in charge of hatcheries in wild remote regions such as those at Babine and Stuart lakes, at Lakelse river (Skeena river), Rivers Inlet and Pemberton (Birkenhead river) where the successful operation of these institutions in isolated localities calls for great resourcefulness and unusual qualifications. Storms in the mountains, land and snow slides, freshets in the upper waters, often of the nature of torrents, make the work difficult and perilous, and the great success reported is a testimony of skill and energy in the officers in charge. At Pemberton hatchery, great freshets have threatened the success of the season's work, but Officer Robertson overcame all the difficulties, while at Lakelse, the supply dam, through damage by giant trees, and changing channels and banks ran short of water at a most critical time (February 28), and Mr. Whitwell's skill and energy were severely tested, but resulted in success and the eggs were all safely developed and hatched. The dam can only be made secure by the use of solid cement, as the officer recommends. Hardly a season passes without some more or less trying experience testing the resourcefulness and skill of the various officers in charge, and the success which I have been able to report of the fish-breeding operations as a whole reflects the highest credit on the staff in the different provinces.

# SUPPLIES OF SALMON TROUT EGGS FROM FISHERMEN.

It will be noticed that, on the Georgian Bay waters, reliance has been placed on the fishermen for supplies of salmon trout (*C. namaycush*) instead of the pound-nets operated by departmental officers for over twenty years. Certain United States hatcheries (in Michigan and Wisconsin) have secured considerable supplies of these eggs from our fishermen on the Canadian side and in return for this courtesy have planted a proportion of the fry annually on our side of the boundary line; but it seemed desirable to take advantage of the large quantities of spawn in a ripe condition which

are available during the latter part of October. The main spawning time being late in that month, great numbers of ripe fish are caught annually before the November close season commences. By utilizing the fish taken by the fishermen for commercial purposes a further source of supply is secured. As reports in various years show there has been some uncertainty as to the full quantity to be obtained from the departmental nets. Indeed in the department's report for 1888, already referred to, it is pointed out that owing to severe weather 5,800,000, instead of 9,000,000, got in 1887, had alone been obtained, the falling off in 1888 being stated as 2,940 mother fish in 1887, and only 1,690 in 1888, a decrease of 1,250 females to get eggs from.

# PICKEREL OR PIKE-PERCH HATCHERY OPENED.

The operation of a pickerel or pike-perch hatchery erected at Point Edward, at the head of the St. Clair river, is an important step, the pickerel being one of the marketable fish of prime commercial value.

The new hatchery on the Miramichi river, N.B., was completed and replaced the old hatchery operated since October, 1874.

# LOBSTER HATCHERIES.

The five lobster hatcheries at Shippigan, Shemogue, Canso, Pictou and Charlottetown, have had a successful season and turned out 501,000,000 fry, an enormous output which will be increased shortly when three further new hatcheries at Georgetown, P.E.I., Lunenburg, N.S., and Magdalen Island, P.Q., are erected and in operation. The question of rearing lobsters, just as fingerling salmon and trout have been reared, has long been under consideration; but many difficulties arose and it has not hitherto seemed very practicable. The experiments of Professor H. C. Bumpus, and the remarkable methods devised by Professor A. D. Mead in Rhode Island waters, appear now to have reached assured success. The mechanical methods of creating sea-water currents and supplying food, in the enclosures containing lobster fry as devised by Dr. Mead, have overcome the difficulties, and lobster rearing may now be regarded as an accomplished fact and quite feasible as a branch of fish-culture.

# QUANTITIES DISTRIBUTED FROM THE HATCHERIES.

The following table shows the number of various species of fish turned out from the Dominion hatcheries, 1907-08:

-				
Number.	Name of Hatchery.	Number of Fry distributed.	Number of Eggs sent to other Hatcheries.	Species of fish.
1 2 3 4 5 6 7 8	Ottawa, Ont  ""  Newcastle, Ont. Sandwich, Ont.  Gaspé, P. Q. Tadoussac, P. Q. Lac Tremblant, P.Q. St. Alexis, P. Q. Magog, P. Q.  ""  Bedford, N. S	105,000 840,000 115,000 440,000	292,000 500,000 300,000 155,000	Salmon Trout. Whitefish. Atlantic Salmon. Speckled Trout. Salmon Trout. Whitefish. Pickerel. Atlantic Salmon.  """ Salmon Trout. Speckled Trout. Speckled Trout. Speckled Trout. Grey Trout. Atlantic Salmon.
10 11 12 13 14 15	Margaree, N. S. Windsor, N. S. Bay View, N. S. Canso, N. S. Miramichi, N. B. Restigouche, N. B.	33,000 925,000 721,000 155,000,000 60,000,000 1,670,000 2,139,000		Atlantic Salmon.  Lobsters.  Atlantic Salmon.
16 17 18 19 20 *21 *22 23 24 25 26 27 28 29	Grand Falls, N. B Shemogue, N. B Shippegan, N. B Charlottetown, P. E. I. Kelly's Pond, P. E. I Selkirk, Man Berens River, Man Fraser River, B. C Granite Creek, B. C Skeena River, B. C Harrison Lake, B. C Nimpskish, B. C. Pemberton, B. C. Rivers Inlet, B. C	1,365,000 126,000,000 80,000,000 80,000,000 790,000 45,000,000 5,500,000 6,858,000 4,125,750 14,724,600 4,870,000 10,820,000 7,577,000	8,000,000	Atlantic Salmon. Lobsters.  "Atlantic Salmon. Whitefish.  B. C. Salmon. """ """ """ """ """ """ """ """ """ "

# FISH

STATEMENT showing the Places where and the years in which the Dominion Fish Hatannually since the commencement of

Year.	Ontario.			QUEBEC.		
YEAR.	Newcastle.	Sandwich.	Ottawa.	Magog.	Tadoussa	
	Fry.	Fry.	Fry.	Fry.	Fry.	
1000 70	1,070,000					
1868-73					)	
1874	350,000 650,000				60,00	
1875		8,000,000			150.00	
1876	700,000				1,180,00	
1877	1,300,000	8,000,000			707.0	
31878	2,605,000	20,000,000			1,250,0	
1879	2,602,700	12,000,000				
1880	1,923,000	13,500,000		900 000	1,155,0	
(1881	3,300,000	16,000,000		200,000 975,000	334,0	
1882	4,841,000	44,000,000			660,0	
1883	6,053,000	72,000,000		250,000	995,0	
1884	8,800,000	37,000,000		100,000	985,0	
1885	5,700,000	68,000,000		300,000	720,0	
1886	6,451,000	57,000,000		1,400,000	1,627,0	
1887	5,130,000	56,500,000		675,000	900,0	
1888	8,076,000	56,000,000		3,475,000	850,0	
1889	5,846,500	21,000,000	~ #90 000	2,800,000	1,600,0	
1890	7,736,000	52,000,000	5,732,000	2,875,000	1,700,0	
1891	7,807,500	75,000,000	7,043,000	3,050,000	1,300,0	
1892	4,823,000	44,500,000	4,909,000	2,400,000	624,0	
1893	9,835,000	\$8,000,000	6,208,000	3,600,000	2,060,0	
1894	6,000,000	47,000,000	4,480,000	2,035,000	1,975,0	
1895	6,000,000	73,000,000	3,210,000	3,350,000	2,060,0	
1896	5,200,000	61,000,000	3,950,000	3,400,000	2,500,0	
1897	4,200,000	72,000,000	4,100,000	4,500,000	3,272,0	
1898		71,000,000	3,020,000	3,100,000	2,200,0	
1899		73,000,000	3,700,000	3,098,000	2,125,0	
3 1900		90,000,000	3,450,000	3,099,000	1,400,0	
1901	5,900,000	67,000,000	3,410,000	3,135,000	2,960,0	
1902	650,000	100,000,000	1,245,000	935,000	2,730,0	
1903	2,500,000	90,000,000	1,201,000	885,000	1,625,0	
1904	1,475,000	75,000,000	877,000	283,000	2,615,0	
3 1905	1,480,000	166,000,000	1,103,000	1,098,000	1,550,6	
1906	1,550,000	88,000,000	1,123,000	875,000	2,435,0	
5(1997	1,807,000	103,000,000	1,552,000	1,210,000	3,360,0	
i a						

# SESSIONAL PAPER No. 22 BREEDING.

cheries have been erected; also the number of Fry distributed from each Establishment operations, including the year 1907.

Fry.   Fry.	Gaspé.   St. Alexis   des Monts.   Tremblant   Gouche.   Miramichi   River.   Hatchery, Shippigan.   Fry.   (	QUEBEC—Con	ntinued.		N	TEW BRUNSWI	CK.		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Gaspé.				Miramichi		Hatchery,	Hatchery,
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		}		100,000	60,000			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	110,000							
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							*	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								****
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							* * * * * * * * * * * * * * * * * * * *	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			* * , * . * . * *					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		* * * * * * * * * * * * * * * * * * * *						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		1					* * * * * * * * * * * * * * * * * * * *	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							,	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		1						2 4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1,100,000							
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	794 000							
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\frac{1}{1,100,000} \left  \begin{array}{c} 298,000 \right  \\ \hline 570,000 \right  \\ \hline 2,333,000 \right  \\ \hline 1,400,000 \right  \\ \hline 807,000 \right  100,000,000 \right  \\ 100,000,000 \\ \hline \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		195 000						
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			570,000			807,000		
1. TULTURU   450. URU   560. URU   1. UZUTRU   1. DOU UUU   1. OOU URU   1. ZZ UUU UUU   1. UZUTRU									
	1,179,000 010,000 042,000 2,139,000 1,079,000 1,309,000 120,000,000 80,000,00								

FISH-BREEDING.
STATEMENT showing the Places where and the Years in which the several Fish Hatcheries have been erected, &c.—Continued.

	Bedford.	The second secon	The second secon			The state of the s			
	•	Margaree.	Windsor.	Lobster Hatchery Bay, View.	Lobster Hatchery, Canso.	Kelly's Pond.	Lobster Hatchery, Charlottetown.	Fraser River.	Harrison Lake.
	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.
	:		:						
	:	:	:						
	395,000								
	1.000,000								
	1,400,000						:		
	1,740,000								
	730,000					500.000			
	000,000					275,000			
: : : : : : : : : : : : : : : : : : : :	000,000				: : : : : : : : : : : : : : : : : : : :	9,000			
	850,000	*315,000				1,000,000			
	800 000	*659,000				1,010,000			
	000,000	*000,000				1,000,000,1			:
	T,000,000	.853,000				T,000,000	****		
	670,000	*772,000				1,100,000		1,800,000	
	950,000	*1.179.000				₹ 400,000 €		2,625,000	
	4 930,000	*1,415,000				500,000		4,414,000	
2001	4 200,000	*1,110,000	:			Output Of		5 807 000	
	4,530,600	1,559,000			:			2,000,000	
	3,850,000	*2,034,000				Dunk K.		4,419,000	
	3.860.000	*1.953.000			**************************************	Hatcher y,		6,640,000	
	9,550,000	*1 000 000		2 000 000		now closed		3,603,800	
	2,000,000	***************************************		000,000,1		TOWN CLOSED OF		6,000,000	
	2,020,000	000,000		69,500,000				2,000,000	
	3,180,000			153,600,000				5,764,000	
768	3.805.000	*288.000		160,000,000				7,800,000	
	9012,000	* 000 %01*		160,000,000				6,300,000	
: : : : : : : : : : : : : : : : : : : :	0,010,000	000,001		100,000,000				0,000,000	
	4,225,000	*243,500		100,000,000				10,333,000	
	5 450 000	*496 000		90,000,000				5.928.0 0	
-	000,000	Tooloot		000,000,70				2000	
	5,000,000			85,000,000				2,520,000	
	4.025.000			100,000,000				4,742,000	
	2 070 000			19.5,000,000				6,900,000	
:	0,010,010			127,000,000				0,700,000	
	3.980.000			110,000,000				:	
	000,000	95 000		190,000,000				9.214.000	
:	000,000	000,000		200,000,000				0,575,000	
	000,017	000,000		164,000,000				3,57.6,000	
	1 213 000	562, 500		175,000,000			60.000.000	6.584.000	
	000,000	000000000000000000000000000000000000000		182 000 000	000 000 0		100,000,001	0,550,000	6 505 000
	000,000	000,887		100,000,000	6,000,000		100,000,000	2,000,000	000,000,000
906	1.071.000	910,000	575,000	118,000,000	71,000,000	720,000	90,000,000	9,130,000	28,773,000
	479,000	000 000	791,000	188,000,000	60,000,000	200,000	80,000,000	5,500,000	14,794,600
	479,000	000,626	(77,000	155,000,000	000,000,000	nnn'ne	200,000,000	6,500,000	LT, ( ZT, 000
and the state of t	000000000000000000000000000000000000000	1 0 1	1000		000 000	1	000 000	000 000 00 1	000 000 02
Total	72,472,000	17,543,500	1,296,000	2,044,300,000	139,000,000	000,686,7	330,000,000	150,920,800	20,002,000

Year,						MAINITODA	IOBA.	TOTAL
	Granite Creek, Sicamous.	L. Lakelse,   Skeena River.	Pember- ton.	Rivers Inlet.	Nimpkish River.	Selkirk.	Berens River.	
	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.
		:	:		:			1,070,000
2 1874								1,570,000
1.75		:						9,655,0
4 18/6.								13,451,0
					:			27,042,000
20 TOT 0		:	:	:				21,084,
0007			:	:	:			99 040 (
			:	:			:	55 500
C. X.	:		:	:				00, 00,
300	:		:	:	* * * * * * * * * * * * * * * * * * * *			52 1/3 000
200	:		:	:	:			81,067 81,067
.8%5.	:	:	:	:				76.714
14.1886	:	:	:	:				79,273,000
			:					88,109,
		:	:	* * * * * * * * * * * * * * * * * * * *				47,699,
1389.		:	:					90,212,
1890,	:	:			:			115,772,
1891	:			* * * * * * * * * * * * * * * * * * * *				135,959
20 1892			:	:				258,314,000
18.03	:		:			14 500 000		254,919,000
1894			:			19,000,000		294,040
1895,		: : : : : : : : : : : : : : : : : : : :	:			4 500,000		909,459,000
1896.		:	:			1,000,000		198,859
1897.						000 000 0		199, 477
1898	:					20,000,000		222,350,000
1899.						32,000,000		271,996,000
		:				0006006		203,540,000
1901	000000000000000000000000000000000000000	:				93 000 000		271,301
1902.	6,760,000	0000027		:	1 636 000	19,000,000		314,576,
1903	4,866,900	3,400,000			9,496,000	31 500 000		473,258,
32,1904,	4,000,000	2,767,000			9,800,000	25,500,000		627,541,400
	4,000,000	000,101,0	17 450 000	000 000 8	4 873 400			657,925,
	10,888,000	7,195,750	10,450,000	7 577 000	4 870 000	45.000.000	92,000,000	813,979,
	0,000,000	4,140,100	TO,020,000	1,011,000	7,000		1	
Tr + v1	36 446 500	19.127.650	28.270.000	15.577,000	16,675,400	236,000,000	92,000,000	6,284,014,350

# HATCHERIES AID SCIENCE.

The desirability of co-relating the records of the various hatcheries with a view to deciding many questions of scientific and of practical value in fish-development has long presented itself to me. The three biological stations at St. Andrews, N.B., Departure Bay, B.C. and Georgian Bay, Ont., would find much aid in the technical work carried on by notes and observations at the various hatcheries. Thus the question of the dates and periods of spawning, and the conditions which may hasten or delay them could be largely decided by a comparison of the hatchery records for a number of years. Thus the first ripe sockeye (S. nerka) eggs last season (1907-8) were obtained at the Lakelse hatchery, Skeena river, on August 6, and the spawning continued until September 3. At Stuart's lake, head of the Fraser river, it was nearly two weeks later (August 18, and the last eggs were got on October 15. Pemberton hatchery took its first eggs on August 31, and the last on October 26. The sockeyes in the Babine waters (head of the Skeena river) were not ripe until September 4th and they continued nearly six weeks, while the Harrison River hatchery, relying on salmon schools that have a short migration from the sea, obtained eggs about the same date (at Silver Creek), on September 10 at Douglas Creek, and at the lowest spawning ground viz.: Morris Creek, on September 21. The Rivers Inlet fish have a short migration, but it was September 18th before ripe fish were found and most fish occurred about October 11 and continued till the 22nd, a condition much the same as the Nimpkish river (Alert Bay) which secured its eggs between October 8 and 31. The salmon having the longest distance to ascend, enter very early and reach the upper waters at an early date. The early schools must be distinct from the later schools, which implies that each school of migrating salmon has its own spawning resort, supported by the strongly marked local variations noticed by fishermen and those who handle salmon. In the reports of the hatchery officers, variations in the size of the eggs produced have been observed, and at the Harrison Lake hatchery it has been noticed that the size of the ovum is distinctive for each locality. The salmon resorting to the spawning grounds in the Harrison river produce larger eggs (viz. 6,000 to the quart) than those which go into Morris Creek which is close by. Eight thousand eggs from the Morris Creek salmon fill a quart measure, whereas at Silver Creek up Harrison lake, the eggs are midway in size, viz.: 7,000 to a quart. The Indians have long claimed that they are able to identify these local schools, and it is certainly very remarkable that there should be such variation in the eggs as the Morris Creek salmon migrate up the Harrison river rapids, yet never remain in the rapids, nor do the Harrison river sockeyes with the large eggs ever appear to enter Morris Creek, a short distance away. Records made year after year and compared would yield most valuable results and afford much needed information as to the movements and the local variations of important salmon schools.

### CONCLUSION.

The report of the Superintendent of Fish Culture is followed, as usual, by the reports of the officers in charge of the respective hatcheries, and as a final appendix to this fish-breeding report is the report of the department's oyster expert (Mr. Ernest Kemp).

I have the honour to be, Your obedient servant.

EDWARD E. PRINCE,

Commissioner of Fisheries and General Inspector of Fisheries for Canada.

# APPENDIX A.

Prof. E. E. PRINCE.

Dominion Commissioner of Fisheries, Ottawa.

SIR,—I have much pleasure in submitting my annual report as superintendent of the fish cultural operations conducted under the Fisheries Branch of the Department of Marine and Fisheries for the season of 1907-8.

Reference was made in my last report to the extension of this service and during the past year further additions have been made to the number of establishments erected at various points for the purpose of assisting nature in the work of keeping up and replenishing one of Canada's great national assets, viz.:—The fisheries.

During the past season four additional buildings have been put in operation, thus giving a total of thirty-six hatcheries as against thirty-two for the season of 1906-7.

These establishments are distributed over the various provinces as follows:-

British Columbia 9	
Manitoba 3	
Ontario 6	
Quebec	
New Brunswick 5	
Nova Scotia 5	
Prince Edward Island 2	,

### HATCHERY SITES.

The remarks on this phase of the work which appears in my last report are so pertinent and to my mind so important as a factor in obtaining good results that I again desire to call attention to them.

The selection of a suitable site is the initial and most important factor of the work. Not only must a supply of pure water be available at all times, but the spawning grounds should be within a reasonable distance of the location.

Whilst this remark refers generally, it is perhaps more applicable to British Columbia where it is found that the Pacific salmon will not survive in confinement to the same extent as the Atlantic salmon, hence it becomes necessary that the locations for hatcheries on the Pacific coast must be nearer the spawning grounds than is actually necessary in the east, which means the erection of hatcheries far up the streams, and, as very often happens in isolated places, hard to reach and expensive to maintain.

The question arises, why not locate the hatcheries in more convenient places and transport the eggs and fry to and from such points. This could be done providing the navigation would allow; but unfortunately for the system in British Columbia the streams are so rapid that the reaching of even the spawning beds nearest the mouths of the rivers would be a very expensive and hazardous undertaking.

Hence it became necessary when locating additional hatcheries in this province to go as far up the Skeena river as Babine and Stuart lakes to reach the natural spawning beds, at which points it is expected the hatcheries located there, which are now in operation, can be filled with eggs every year.

As a proof of the wisdom of this contention especially in so far as British Columbia is concerned, it may be said that before the end of September of this season,

both the Babine and Lakelse hatcheries were filled with eggs. The parent fish being caught practically at the doors of the hatcheries and thus enabling the fry to be distributed on the natural spawning beds without necessitating portaging the eggs and young delicate fry long distances over rough roads.

### RETAINING PONDS.

This is another adjunct of value and importance to fish culture as it enables the parent fish to be purchased from the commercial catch and thus not only are the eggs produced from these fish saved, but the parent fish themselves are released after being spawned and return to the sea.

### REARING PONDS.

In connection with nearly all the hatcheries in British Columbia, it has been possible owing to natural advantages to establish ponds. These semi-enclosures protect the fry from climatic conditions and their natural enemies to a very large extent. They remain in these ponds until instinct calls for a change, when they can, of their own accord, leave the enclosure and take up the graver fight for life in their natural haunts.

These ponds are looked upon with favour and are being put in operation at all hatching points affording the necessary facilities.

# DISTRIBUTING FRY.

It has not been possible to put into force my suggestion of last season to stock lakes by localities as owing to the increasing number of individual applications, it was impossible to change a system which has been in vogue for so many years without causing wide dissatisfaction. It must, however, be better understood that owing to the difficulty of securing speckled trout eggs in large numbers that it is utterly impossible to fill but a few of the many applications for this much applied for sporting variety.

# HATCHERIES.

The following remarks apply to the respective establishments which have been uniformly successful with the exception of the two hatcheries located on Lake Winnipeg, which, owing to the early freezing up of the north end of the lake, it was impossible to fill with eggs; the departmental steamer being caught in the ice and remained all winter until released at the opening of navigation this spring.

With such a large number of hatcheries in operation it is impossible to avoid mishaps, and the best laid plans in fish culture as in other business transactions fail to materialize, but on the whole there is cause for congratulation that general success has followed the department's efforts to resplenish the waters of the Dominion with fish life.

# BRITISH COLUMBIA.

# Harrison Lake Hatchery.

This may be considered the banner fish-breeding establishment in the Dominion. It is a pretentious building some 220 feet long and 40 feet wide.

The location from practical and scenic points are all that could be desired and its close proximity to the reliable spawning ground of Morris Creek adds greatly to its

value as an adjunct to nature in stocking the Fraser river watershed with that valuable commercial commodity, the sockeye salmon.

Mr. Thos. Robinson who has been in charge of this establishment since its inception, resigned the position at the close of the fiscal year to enter commercial life.

# Pemberton Hatchery.

One of the greatest transformation scenes coming under my notice has taken place on the Birkenhead river at the point where this hatchery is located. From a dense forest far in the interior of British Columbia, has been erected a modern fish natchery, and the grounds surrounding the building would be a credit to any establishment located in the heart of civilization. The energetic officer in charge has taken advantage of all that nature offered to improve the efficiency of the hatchery and at no additional expense to the department, the improvements having all been made by the regular employees. The installing of the electric light plant at this out-of-the-way point reflects great credit on the officer in charge. It might be here explained that the fry from this establishment choose their own time for leaving their parent waters, Owl creek, which empties into the Birkenhead, being equipped with stop logs, which allows of the little fish dropping from pool to pool and thus eventually finding their way into the Birkenhead river.

# Granite Creek Hatchery.

Owing to the very high water in Shuswap lake at the spawning season, few sockeye were taken and in addition to this it is questionable if the run of adult fish was up to the usual standard in these waters.

For some seasons past eggs taken from parent sockeye captured in Morris Creek, Harrison lake district, have been transferred to Granite Creek hatchery and the resulting fry distributed in creeks emptying into Shuswap lake and these are now returning to their parental waters as adult fish which no doubt accounts for the distinct species of sockeye found there.

This establishment is situated on the main line of the Canadian Pacific Railway and the practical results obtained together with economical management by the officer

in charge is very satisfactory.

# Lakelse Lake Hatchery.

This hatchery is located on Lakelse lake, sixty-five miles up the Skeena river from Port Essington, and whilst difficult of access splendid returns are derived from the operations conducted here. The building is small, accommodating about 4,500,000 eggs. The eggs are procured in this section earlier than at other establishments, the quota required being deposited on the trays and undergoing incubation by September 3. Over four millions of fry were liberated from this small establishment as the result of last season's operations, the work of distribution being completed by April 22. The run of sockeye salmon was good and no difficulty was experienced in securing all the eggs the building could accommodate. Mr. Whitwell, the officer in charge, is a capable and energetic officer and fills a difficult position in a very satisfactory manner.

# Rivers Inlet Hatchery.

The operations at this establishment were very satisfactory and resulted in a distribution of 7,500,000 fry for the season's work. The run of parent fish was very satisfactory and large numbers spawned naturally in the different creeks. This establishment

lishment is also difficult of access, but in British Columbia it is absolutely necessary that the hatcheries should be as near the natural spawning beds as possible as the parent fish ascend to the head waters of the various rivers; this cannot be very well avoided.

# Nimpkish Hatchery.

This is a small establishment operated by the British Columbia Packers Association. The result of the operations for the season of 1907-8 was a distribution of some 4,900,000 fry in good condition. This establishment is doing good work.

# Babine and Stuart Lake Hatcheries.

It was strongly impressed upon the department that the fishing interests of the Pacific coast demanded additional hatcheries, and to meet these requirements two buildings were erected in the northern portion of the province; the Babine establishment being on the Skeena river watershed, and the Stuart lake is on the Fraser river waters.

These hatcheries, owing to the long and arduous portages of all building material and maintenance supplies, were expensive and difficult to erect; but owing to the indefatigable energy of Mr. W. H. Brunel, coupled with the assistance of building foremen Blair and Nicholson, they were completed in time for the fall operations of 1907. The buildings are constructed of logs, each being 40 feet by 90 feet, and will accommodate ten millions of eggs to each establishment.

The initial season's operations are very satisfactory, the Babine hatchery accounting for a distribution of some 4,600,000 fry, and the output from the Stuart lake hatchery was some 2,400,000. As the buildings were barely completed before the spawning season was over, the result is very satisfactory to the department and very creditable to Officers Pretty and Gibbs.

# Fraser River Hatchery.

Since the erection of the large hatchery on Harrison lake, it has been difficult to secure the required quantity of sockeye eggs for this establishment as Morris Creek, formerly the source of supply for this hatchery, was drawn upon as a basis for the larger hatchery on Harrison lake. The building and dam are in need of extensive repairs, but it is questionable, considering the difficulty of procuring sockeye eggs in sufficient quantities within a reasonable distance of the hatchery, whether a large expenditure for repairs would be in the interests of the service. The suggestion of hatching cohoe eggs only at this point is worth considering and if adopted, the repairs required would be justified, as a full quota could be obtained each season.

Some 10,400,000 fry were liberated during the past season, which is considered very satisfactory.

# ONTARIO.

# Sandwich Hatchery.

The only whitefish hatchery in operation in Ontario at present, is located on the Detroit river, and is stated to have been of great assistance to nature in replenishing the waters of Lakes Erie, Ontario and other adjacent bodies of water with this valuable commercial species of fish. It is only within the last three years that whitefish have again become plentiful in the Bay of Quinte, and it is stated on all sides that the increase is the result of distribution from the Sandwich hatchery. Fisher-

men, stating that beyond question they are, owing to their size and colour, the progeny

of whitefish indigenous to the waters of Lake Erie.

Of the one hundred milions of eggs placed in this hatchery, fifty-four millions were purchased from Mr. C. W. Gauthier, and the balance were taken from fish captured under the superintendence of the department's officers. In addition to the quantity placed in this hatchery, some twenty-four millions were transferred to the establishment located on the Red river, in Manitoba.

The season's operations resulted in a distribution of some seventy-nine millions

of fry.

# Ottawa Hatchery.

The fry from this establishment is distributed over a very wide area, necessitating about three weeks' steady travelling by four men, and a deposit of fry in no less than sixty-seven lakes. The operations included the hatching of salmon trout, speckled trout, Atlantic salmon, ouananiche, whitefish and pickerel. The past season was a very successful one, resulting in a total distribution of over two million of fry in the smaller inland lakes in the surrounding country.

# Newcastle Hatchery.

This establishment, located on Lake Ontario, is the parent hatchery of the Dominion, as at this point the late superintendent of fish culture commenced the incubation of fish, and the service which has now been extended to all parts of Canada, may be said to have received its inception from this establishment. For many years the eggs required have been procured from parent fish captured in Georgian bay, and whilst somewhat expensive, the eggs were always in good condition, and gave full returns for the money invested. Last season, over two millions of fry were distributed in the waters of Lake Ontario, Huron and the smaller inland lakes.

Reference must be made to the yearling salmon trout which are now an annual feature of the operations. They are distributed in the spring, and last season some 3,000 beautiful specimens of this variety were liberated. They grow rapidly in the

rearing tanks and the spring water is ideal for this purpose.

# Wiarton Hatchery.

The season of 1907-8 saw the first hatchery on Georgian bay in operation, and for an initial season, the results are very gratifying. The eggs were procured from the principal fishing grounds and taken from the commercial catch of fish. This is a direct saving, as otherwise these eggs would have been lost to both natural and artificial incubation. The spawn takers accompanied the tugs to the fishing grounds and as the nets were fished, such fish as were in a condition to yield eggs were spawned and the total result was a collection of over five millions of eggs, from which over 4,500,000 of fry were liberated in the waters of Georgian bay and Lake Huron. These eggs were collected at a nominal expense; the hatchery being filled at a cost not exceeding \$300. The officer in charge, Mr. A. McNab, is a valuable employee, and spares no pains to conduct the establishment under his charge in a competent and economical manner.

# Sarnia Hatchery.

During the year of 1907-8, the first pickerel hatchery in Canada was put in operation. It is true that for several seasons past, this species have been incubated in the whitefish hatchery, located on the Detroit river, but this establishment was inaugur-

ated for this specific purpose and is located on the St. Clair river, within easy distance from the spawning grounds. The land on which the building is located is leased from the Grand Trunk Railway Company at a nominal rental. There is no close-season for pickerel at this point, and the eggs are taken from fish caught for commercial purposes.

# Quinté Bass Ponds.

The ponds, located on the Bay of Quinté, are becoming of more service to the department each year, but the area is too small to afford anything like the number of young bass required to fill the applications.

Last season eighty-two adult fish were placed in the enclosure, and after spawning were removed from the pond and the young fry allowed to grow until the fall, when they had reached an average of three inches in length. Owing to the prolific propensities of the bass family, it is not possible to even estimate the quantity of young fish hatched, but the distribution was all that could be desired, and resulted in the stocking of many waters with this valuable fish.

# QUEBEC.

# Magog Hatchery.

This establishment is located on Lake Memphremagog, and the bulk of the eggs incubated are taken from grey trout captured in this lake. For some seasons a small quota of Atlantic salmon eggs have been incubated at this point, and deposited in the lake, and from reports received are doing well, a number having been caught by hook and line, and the officers of the department, when conducting the spawning operations, have caught specimens of this variety weighing seven pounds.

The total distribution for the season of 1907-8, was over a million of fry.

# Lake Tremblant Hatchery.

This is a small building located on Lac Tremblant, and was erected for the purpose of replenishing the waters of this and adjoining lakes with fish life. The species incubated are salmon, speckled trout and Atlantic salmon.

Many of the lakes to be stocked in this section are difficult of access, and train connections poor, consequently in some few cases it is next to impossible to convey the fry in as good a condition as could be wished. It is the opinion with some that fish will live indefinitely so long as they are in water, and the fact that as soon as the oxygen contained in the water is consumed by the fish they die, unless supplied with fresh water, is not generally understood, and consequently the officer is blamed for neglect when he may have done all that was humanly possible in his endeavours to save the fish. This small hatchery is doing good work, it having been reported to me that the fishing in Lac Tremblant has been much improved.

# Rearing Ponds, Lake Lester.

These ponds are used solely for the purpose of rearing fish sent as fry from other hatching establishments.

The work has been a great success owing largely to the constant attention on the part of the officer in charge. The care of thousands of fry for a period of one year involves a great deal of hard work as their development must be carefully watched and possible mishaps prevented as a mistake on the part of the officer would jeopardize the whole season's operations. Over three hundred thousand of fingerlings were distributed during the season of 1907-8, which is very encouraging.

# Tadoussac Hatchery.

This hatchery is located at the mouth of the Saguenay river, and is devoted entirely to the incubation of the Atlantic salmon. The parent fish are captured in the spring of the year under the supervision of the officer in charge of the hatchery and placed in a retaining pond, where they are held until ready for spawning purposes in the fall. The female fish yielded some 3,360,000 eggs, an average of over 10,000 eggs to the fish. The results of the season's operations were a distribution of three millions of fry.

Some of the waters requiring stocking from this establishment are difficult to reach with fry, and to overcome this, a subsidiary hatchery has been established, and the eggs are conveyed there in an eyed condition and when finally hatched, the fry are liberated. This is an economical system financially and otherwise. This establishment is well conducted.

# Gaspé Hatchery.

This establishment is supplied with eggs from the retaining pond at Little River, St. John, N.B.

The fry are distributed far up the rivers adjacent to the hatchery, and owing to the distance it appears necessary to travel, the task is a tedious one. The operations of 1907-8 were successful, resulting in a distribution of 1,600,000 Atlantic salmon fry.

# Bark River Hatchery.

This small establishment, located in the county of Maskinongé, is, from the sportsmen's standpoint, one of the most important hatcheries in the Dominion. It is devoted exclusively to the hatching of the sporting varieties of fish. Last season nearly 700,000 speckled trout and salmon fry were liberated. The speckled trout eggs are hard to procure, necessitating much labour, the eggs having to be portaged for miles by hand through the bush. It is, however, successfully operated and yields good results.

# NEW BRUNSWICK.

# Restigouche Hatchery.

This establishment is located at Tide Head, on the Restigouche river. The parent salmon are captured in the spring, under the supervision of the officer in charge and retained in an inclosure until ready for spawning operations in the fall, after which process they are liberated.

It is satisfactory to note that both landlocked salmon and salmon trout have been caught in some of the lakes, where they have been deposited from this hatchery, and

point to the benefits derived from the department's efforts in this direction.

In connection with this establishment, there is a rearing pond for the fry in which last season some 25,000 fry were retained until they were six months old, and then liberated. This is a good system, and will be extended as opportunity offers.

# St. John River Hatchery.

This establishment is located on the St. John river, a short distance from Grand Falls. Atlantic salmon are incubated in this hatchery, the eggs being obtained from the retaining pond at Little River, St. John. For many years the work was under the able management of Mr. Chas. McCluskey, and in his death, which occurred last year, the department lost a valuable and respected servant. The assistant was pro-

22 - 17

moted to the position of officer in charge, and being competent, the past season's operations were well conducted, and resulted in a satisfactory distribution of fry.

# Miramichi Hatchery.

The old hatchery at this point having outlived its usefulness, it was decided to erect a modern and larger building which would accommodate a greater number of eggs.

This was done and the building completed in time for the season's operations of 1907-8. The parent fish are captured near the hatchery and retained in an enclosure until spawning time, when some four millions of eggs were collected an average of about 5,800 eggs per fish. The loss in eggs and fry was abnormally high, and whilst the matter was fully enquired into, it was difficult to give any stated reason therefor. The loss at this establishment is as a rule about the same as at other salmon hatcheries, but the appliances in use being all new, may possibly have had some effect on the eggs.

# Little River Retaining Pond.

This pond is located about three miles from the city of St. John, and is well adapted to the purpose for which it was constructed. Last season some 1,250 adult salmon were retained from July to October, with comparatively few deaths.

This system is a particularly good one. The fish are purchased from the commercial catch, and not only are the eggs saved, but after spawning operations are completed, they are released, find their way to sea and again return to add a further revenue to the fishermen. The same fish have been in this pond two or three different seasons. The average yield of eggs from fish retained in this pond is 7,700 eggs, but it must not be overlooked that some of them weighed as high as 35 pounds each. The total number of eggs collected was 5,600,000, and they were incubated in hatcheries located at Grand Falls, Gaspé Basin, Bedford and Margaree, which establishments are entirely dependent on the success of the operations conducted at this point.

# Lobster Hatcheries.

In this province (New Brunswick) there are also two lobster hatcheries, located at Shemogue and Shippegan, respectively. The female lobsters are reported as having been scarce owing to the early warm weather, consequently it was not possible to secure as many eggs as usual.

# NOVA SCOTIA.

# Bedford Hatchery.

This establishment is located at Bedford Basin, and is supplied with Atlantic salmon eggs from the retaining pond at Little River, St. John, N.B. Several attempts have been made to secure speckled trout eggs, but with indifferent success; the applications for this species are numerous and far in excess of what the department can supply. This is evidenced from the fact that last season from this establishment it was only possible to allot an average of about 3,000 fry to each application.

The hatchery is well managed and the operations satisfactory.

# Windsor Hatchery.

This establishment is located on a small stream, about three miles from the town of Windsor. It was intended as a combination salmon and shad hatchery, but the

incubating of the latter species have not been as satisfactory as would have been wished. It is true, only one attempt was made, but as the shad operations must be conducted in the spring, at a time when every available officer of the Fish Culture Branch is actively engaged at other work, it is a hard matter to arrange, but it is hoped that another season this work will be again taken up. As a salmon hatchery, this institution is a success, upwards of 700,000 healthy fry being distributed in the waters of Hants and adjoining counties.

# Margaree Hatchery.

This establishment, located on the Margaree river, has since its inception, received its quota of eggs from the retaining pond at Little River, St. John, N.B. Owing to the long and difficult road over which the eggs had to be transferred, coupled with the number of hatcheries dependent on the Little River retaining pond, it was considered in the interests of the service to erect a retaining pond within easy access of this hatchery. This idea has been put in force, and will be conducted on the same principle as other retaining ponds, the fish being purchased from the commercial catch and liberated when the spawning operations have ceased. The past season's operations have been very successful, resulting in a distribution of 925,000 salmon fry.

# Lobster Hatcheries.

In this province (Nova Scotia) there are also two lobster hatcheries, located at Pictou and Canso. From the former 127,000,000 and from the latter some 85,000,000 of young lobsters were distributed. The same information comes from this quarter (especially Pictou), that female lobsters bearing eggs were scarce. The quantity of young lobsters liberated, however, is a good indication that the hatcheries were operated successfully.

# Fourthu Lobster Pond.

This is an enclosure owned by Mr. H. E. Baker, at Fourchu, N.S. The female lobsters are purchased from the fishermen and retained in this pond and again liberated in the different areas as the close season commences. This work is done under contract by Mr. Baker and Mr. Levatte, who is responsible to the department for the proper carrying out of the work, reports very favourably on the results obtained, and points to the larger catch of lobsters in the areas where these crustaceans are liberated as proof of the success and justification of the undertaking.

# PRINCE EDWARD ISLAND.

# Kelly's Pond Hatchery.

This hatchery replaced the establishment on Dunk river, and has been very successfully operated. The salmon eggs were last season procured from the Miramichi river, and resulted in a distribution of almost 800,000 Atlantic salmon.

It is pleasing to note that the rivers in which the fry have been liberated for the past two seasons are now full of young salmon, especially the Morell and Winter rivers. There is also a lobster hatchery in operation on the Island, located at Blockhouse Point. The past season's operations commenced on May 24 and continued until July 16. During that period some 80,000,000 of young lobsters were hatched and liberated. Both these establishments are in charge of Mr. A. W. Holroyd, who conducts the same in a very satisfactory manner.

 $22 - 17\frac{1}{2}$ 

In closing my report, I wish to bear testimony to the faithful and valuable services rendered the department during the past season by Mr. Alex. Finlayson, the inspector of fish hatcheries, and also by the officer in charge of each respective hatchery. They have all done their best, and sometimes under very trying circumstances.

I have the honour to be, sir,
Your obedient servant,
F. H. CUNNINGHAM,
Superintendent of Fish Culture.

# REPORT OF FISHERY OFFICERS.

# 1. HARRISON LAKE HATCHERY.

THE HATCHERY,

HARRISON HOT SPRINGS, B.C., March 31, 1908.

Prof. E. E. PRINCE.

Dominion Commissioner of Fisheries, Ottawa.

SIR,—In compliance with your request, I have the honour to submit report of the operations of the Harrison Lake hatchery for the season of 1907-8.

The salmon eggs collected were:-

Sockeye salmon Spring salmon Cohoe salmon	2,406,000	
		25,839,000
Eggs lost with launch	550,000	
Bad eggs		
Shipped to other hatcheries		
**		3,590,550

The weather conditions, last fall, on the spawning creeks, were almost ideal for the collection of ova. This, together with the excellent run of sockeye in some of the creeks, enabled us to make a showing, which for an 'off' year, I consider most remarkable.

The run of fish at Morris creek was the best I have ever seen, or heard of, and we took the greatest number of eggs ever secured there.

Silver creek yielded a good harvest, but Douglas creek and the creeks at 20-Mile were failures.

The operations at Harrison rapids were seriously obstructed by the presence of humpbacks, which were there in millions, the water being literally alive with them. But for this nuisance we would have captured a good many more sockeye at this point.

At Seymour creek we got more fish than usual, and would have had a better showing of ova but for the theft one night of all the fish in the pens. We discovered the culprit, an Indian, and had him convicted and punished. I do not think there will be any further meddling with our pens here for some time.

There is a notable difference in the size and character of the sockeye eggs from the different streams in this district. For instance, the sockeye eggs from Silver creek average 7,000 to the quart; Morris creek sockeyes go 8,000, while those from Harrison river go only 6,000. In handling these eggs we find that the larger ova require the greater care, and are more liable to injury from vibration in transit than the smaller eggs.

Further, although many of the fish coming to Morris creek and to Harrison rapids come simultaneously from the Fraser, and although these two spawning grounds are only a short distance apart, yet these Morris creek type of sockeye are never taken on the rapids, nor are the sockeyes with the larger eggs ever by any chance found at Morris creek or anywhere else in the district.

The Morris creek fish have to come up the rapids to get to their parent stream

but never stay there.

There is a difference in less degree of sockeye frequenting the other streams, sufficient to enable the Indian fishermen, when taking fish in the main river, without

difficulty, to name the particular spawning creek to which they belong.

The question of the grilse that come in with the run of adult fish has claimed our attention, and is, I think, worthy of notice here. They are chiefly of the male sex, and it would appear that those which have mature milt all die the same as the adult fish; not as a result of fungus or mutilation, for there are a large percentage of the young grilse and adult fish which die without any fungus or mark of injury on them. It would be an interesting experiment to have some of these brighter fish transplanted, before they die, to the sea and held there for observation.

This season the young sockeye from the hatchery were all run into the fry ponds outside, giving them the advantage of space and freer movement before they were

finally liberated.

Not being fed in the ponds, they retained their native shyness (which seems to me to be a natural protection), and passed out to the 'strenuous life' alert and with

all their instincts unimpaired.

We had the misfortune to lose our gasoline launch on September 17 last. Particulars of this accident were fully reported to you at the time. The affair was a particularly sad one, on account of the loss of one of our young men, G. McPherson, by drowning. Under instruction of the department every possible assistance was placed at the disposal of the friends of the deceased, and every possible effort made to recover the body, but without success. The lake is very deep where the accident occurred, over 1,000 feet of line was put out without touching bottom, and from the most reliable information I can gather, I have now no reasonable hope that the body will ever be recovered.

The new launch recently provided is a good boat and complied with the terms of the contract with her builders in every particular.

We are now busy fixing up the plant and premises, and I hope to leave every-

thing in good shape for my successor.

In this, my last report, I am glad to bear testimony to the generous and courteous treatment during the years it has been my good fortune to serve you. The severance of this association is one of the chief regrets I have in leaving the service. To Inspector Sword, I desire also to acknowledge my many obligations to him during my long period of service,

I have the honour to be, sir, Your obedient servant, THOS. ROBINSON. Officer in Charge, Harrison Lake Hatchery.

# 2. BON ACCORD HATCHERY.

Fraser River, April 30, 1908.

Prof. E. E. PRINCE,

Dominion Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to submit the following report of the operations carried out at this hatchery during the season of 1907-8.

We had to be indebted to outside sources for nearly all our supply of sockeye eggs, as, although we fenced, with much difficulty, two of the tributaries of the Pitt

river, no sockeyes put in an appearance; in fact, nothing but humpback, and we made no attempt to secure any of their eggs. Our supply of sockeyes were as follows:—

Description.	Where obtained.	Quantity.
Sockeyes	Lakelse	100,000
		4,200,000
Cohoes	Fraser River Tributaries	5,253,000
Spring	From Harrison Hatchery	2,380,000
Trout Eggs	From Eastern Canada	50,000
Atlantic Salmon	From the East	60,000
Total number of eggs, during season.		11,943,000

We also furnished Granite Creek hatchery with 1,000,000 cohoe eggs. We commenced to collect our supply of cohoe eggs about the middle of October, and on November 5 got our first shipment of 192,000 from Tynehead, and about two days after got another of 495,000 from Langley creek. We secured shipments from both creeks at varying intervals till December 10, when the troughs in the hatchery were full, and eggs could still have been obtained in those creeks had it been necessary to collect them. After our supply of eggs had been obtained we were very busy picking out the bad eggs, as for a time they were inclined to fungus, but when we got them cleaned out they hatched and throve very well, and as the temperature during the winter months was favourable, we had no great difficulty in rearing the fry.

The hatchery building was repainted outside last summer, which has greatly improved its appearance, but the sills and floor joists are much decayed, and in the course of another year many of them will want renewing.

The dam on the creek is also completely rotted out, and we have had frequent breaks, but have always been able to stop them, as there is nearly a solid embankment of earth all round where the cribbing and other woodwork was.

The grounds around the hatchery are in fairly decent shape, which repays some for the labour, as we raised sufficient potatoes to supply the employees during the winter and spring, without having to purchase.

There is much difficulty in obtaining a supply of sockeye eggs for the Bon Accord since the Harrison hatchery was built, and took away Morris creek from this hatchery, and this forces us into new and expensive experiments yearly, with but varying success. I think if it were turned into a cohoe hatchery only, a great deal of this might be obviated.

I have the honour to be, sir,
Your obedient servant,

WILLIAM ROXBURGH,
Officer in Charge.

# 3. PEMBERTON HATCHERY.

LILLOOET, B.C., April 20, 1908.

Prof. E. E. Prince, Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to forward report of the past season's operations at this hatchery.

My last annual report was dated June 18, 1907; between then and August 1, when preparations for spawn-taking commenced, a subsidiary hatchery of eight millions capacity was installed on a spring-water creek, having a temperature of 45 degrees, and situated about half a mile from the hatchery. A detailed description of the plant was given in my report for June, 1907, and two millions of sockeye ova were successfully hatched in it during the fall.

In August, three fences were placed in the Birkenhead river, two at the hatchery, the other, three miles below; this fence was only in operation during the latter part of the run, to take fish that would not ascend to the hatchery, but spawn on the lower reaches. From August 13 to September 13, when, judging by the two preceding years the run should have been strong, very few fish appeared, but I think this was due more to the low and clear water prevailing than to a scarcity of fish, for as soon as the fall rains commenced the run came fully up to expectations, and success was further insured by the behaviour of the river, which remained normal throughout the spawning season. Spawning commenced on August 31 and continued to October 8. In six days, from September 21 to 26, 11,000,000 of sockeye eggs were taken, the best day being the 23rd, when 2,500,000 were placed in the hatchery. Twenty-eight millions of sockeye in all were spawned, 15,000,000 of them at the lower fence.

The fish were not as numerous as in past years, and the increase in the number of eggs taken is due principally to the absence of freshets, though the fences were built much stronger than formerly, and would have withstood any freshet, I think. One and a-half million cohoe eggs were also taken in November, after which the fences were taken out.

Four million sockeye eggs were transferred to the Fraser River hatchery, Granite Creek hatchery received a like number, and twenty million sockeye and one and a-half million cohoe were hatched here.

After spawn-taking, in October, the installation of the electric lighting plant was commenced, and between that time and New Year, when it was completed, a dam was built on Owl creek, 500 feet of 12-inch by 16-inch flume erected, 500 feet of 12-inch pipe laid, power-house built, turbine and dynamo set, and buildings wired. The turbine wheel develops ten horse-power, and the dynamo is of 1,000 candle-power capacity. This will effect a great saving in the light bill, in addition to being handier and safer.

From January to March, 350 baskets were made to equip the outside hatcheries. These baskets are slightly larger than the old ones, bing 16-inch by 26-inch instead of 16-inch by 24-inch. With these baskets and the outside hatcheries, the hatching capacity has been greatly increased, and in an emergency 52,000,000 of eggs can be accommodated.

During the low-water period, in March, some much-needed work was done in strengthening the fence bottoms with rock, to prevent cutting. About an acre of good

land some distance from the hatchery, was partially cleared for a garden; this will all be ready for cultivation by next spring and will supply the house with all the vegetables and fruit required.

Fifty fruit trees have already been planted, and some are fruiting this summer, and there has been a good crop of strawberries, raspberries, blackberries and goose-

berries.

The rough ground from the house to the river has been cleared, levelled off and fenced, which greatly improves the appearance of the place. A ditch eight feet wide and 300 yards long has been dug from outside hatchery No. 3, to the river; log riffles will be placed in this to form ponds, in which the young fish can rest on their way down.

The hatchery is now well protected from fire; from a hydrant in the 12-inch pipe, 200 feet of  $2\frac{1}{2}$ -inch hose commands all the buildings, with sufficient pressure to throw a stream over the hatchery.

The usual routine work, painting and varnishing the troughs and headtank,

lacquering basket trays, &c., has been performed.

There are a few spring salmon in the river now, some have been taken by spoon, hook and minnow.

In conclusion, I would say that the staff, as usual, has given good support.

I have the honour to be, sir,

Your obedient servant,

ALEX. ROBERTSON.

# 4. GRANITE CREEK HATCHERY.

KUALT, B.C., April 8, 1908.

Prof. E. E. PRINCE.

Dominion Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to submit the following report on the operations of this hatchery during the past season.

The total sockeye ova taken at Scotch creek, the most important sockeye stream

flowing into the Shuswap lakes, was 648,000.

At Granite, or the hatchery creek, 180,000 sockeye eggs were taken.

The only other stream in this section where an occasional sockeye salmon was observed last season was Adams river.

The Adams lake, rising later than Shuswap last year, the river flowing therefrom was in consequence, at the time of the sockeye run, in flood, and flowing through the woods.

In the trap built across the smaller channel after the flood had subsided only cohoes were taken.

The total cohoe ova taken at Scotch creek, Adams river and Granite creek amounted to 465,000.

With 120,000 humpback eggs from Granite creek, the total ova from the Shuswap

lake section last season amounted to 1,413,000.

The capacity of the hatchery was, however, taken up by shipments from the coast, as follow:—

From Pemberton— From Harrison riv From the Bon Acco	er rapids—Spr	ing salmon		640,000
FT 4 3				

Males exceeded females at Granite creek by four to one.

Two very distinct varieties of sockeye were represented there, both of which were again dissimilar from the sockeye at Scotch creek.

The females arrived at the hatchery trap in a very exhausted condition, some being so weak, that unable to enter the trap against the current, they were lifted over with dip-nets, and so ripe that they had to be immediately spawned.

I believe that these fish had been hatched from Morris creek ova, and as fry liberated at Granite creek, as in appearance they differed from the very red sockeye

that spawn in the Shuswap waters.

The bulk of these fish ripening before they could reach Granite creek, had possibly turned into other streams to spawn, most likely through some prenatal influence, or heredity to Morris creek, 300 miles nearer the sea, which their parent fish had in object while they as ova had been developing.

These green-coloured sockeye females measured 28½ inches, and after being

stripped of their spawn, weighed 6 pounds 9 ounces.

The eggs per female averaged 4,079.

Males of the small bright red variety that now also annually visit the hatchery creek, measured only 20 inches, and weighed 24 pounds.

Accompanying these sockeye to Granite creek, came humpbacks, which to our knowledge entered no other streams in the vicinity; though 65 miles seawards they entered Chase creek in numbers.

The interior of the hatchery has been scraped and repainted this last year, and many improvements made that increase its convenience and accommodation.

The dripping of water from the ceiling, caused by the condensation of moisture thereon during cold weather, has been stopped by filling in over the ceilings with sawdust, 800 sacks of which were used.

At Scotch creek the fence and traps are now again in position.

I am, sir,

Your obedient servant,

D. S. MITCHELL.

# 5. LAKELSE HATCHERY, SKEENA RIVER.

LAKELSE LAKE, April 9, 1908.

Prof. E. E. PRINCE,

Dominion Commissioner of Fisheries, Ottawa.

Sir,—I have the honour to submit herewith my sixth annual report of the operations in connection with this hatchery, for the season, 1907-8.

Messrs. S. Whitwell, G. Kelly, J. Williams, and myself, left Vancouver for the hatchery on July 11, and arrived on the night of the 17th.

After our arrival we commenced relacquering the troughs and repaired canoe, &c. On the 21st Messrs. G. Kelly, Whitwell and myself left the hatchery early in the morning and prospected the rivers and small streams emptying into Lakelse lake. We observed some sockeyes at Sockeye river, also a considerable quantity at the mouth

of Schalbuckhand river, where previous to the last two years there never was any quantity of any importance.

On the 24th, 25th and 26th, Messrs. Johnstone, Kelly, S. Whitwell and myself, with two Indians, started clearing away brush and fixing our fences and pens in the Schalbuckhand river, and on the 30th we also fenced and put in a pen at Sockeye river.

On August 6, we started spawning at Schalbuckhand river, and we collected 120,000 eggs, and from that date we continued collecting ova until September 3, when we had obtained all the ova that we could accommodate in the hatchery, namely, 4,414,000 eggs.

On August 25, I received instructions from the department, through Inspector Sword, to forward some sockeye ova for the New Westminster Exhibition, as far advanced as possible. The Indians that I had engaged for three months objected to taking me down to Port Essington in a canoe with the ova, which is a 75-mile trip, so I paid them off on September 1, which placed me in a very awkward predicament, but, not to be outdone on account of the Indians leaving me in the lurch, I made arrangements for Messrs. J. B. Johnstone and S. Whitwell to accompany me down to Port Essington in our skiff, and we started from the hatchery on September 4, and arrived at Port Essington at 8 p.m. next day, after a very dangerous and hard trip. I was very fortunate in catching a fast steamer next morning, and I arrived at Bon Accord hatchery at 9.30 a.m. on Sunday morning, the 8th, and handed over to Mr. W. Roxburgh, officer-in-charge there, 100,000 eyed sockeye eggs, in splendid condition.

Before leaving Port Essington, I engaged two more Indians, and they returned

with Mr. Johnstone and S. Whitwell to the hatchery.

A few spring salmon were seen in the Lakelse river, spawning on August 21, and

the first cohoe salmon we noticed in the river on September 10.

While I was away from the hatchery, Mr. Johnstone, whom I had left in charge, reported to me on my return that Coldwater creek, where we get our water supply, had got very low and there was hardly sufficient water to supply the hatchery.

I left Victoria again for the hatchery on September 26, but on my arrival at Port Essington on the 29th, I was unable to leave there until October 9, on account of all the river steamers having been wrecked, consequently I had to make the trip in a special canoe, which took us four days before we arrived at the hatchery.

I am pleased to report that on my return I found everything very satisfactory at

the hatchery.

Before leaving the hatchery, I instructed Mr. Johnstone to keep a strict account of all bad eggs during my absence, and when I got back the number of bad eggs they had picked out of 4,314,000 was 17,334, in six weeks, and I am glad to say that all through the season we had the smallest percentage of bad eggs that we have ever had

at the Lakelse hatchery in one season.

Our first snowfall was on November 3, but not until the 22nd did it stay on the ground, and on February 14 we had 53 inches on the level, and 131 inches for the entire fall all winter. On January 29, which was our coldest day, the water stopped running entirely in the hatchery for a little while, also again on February 28, which enabled us to cut away the ice above the dam to find out the cause. We found two places where the dam was leaking badly, which we stopped up temporarily with brush and sacks of gravel, rocks, &c., that caused the water to rise again above the dam to its normal height, so that we had ample water to carry us through the remainder of the season; but something will have to be done this coming season to enable us to have a more permanent supply, and I think it will be advisable when we return to take back with us about half a ton of cement, so that we can mix some with gravel and sand, to form a concrete to fill up the holes where the dam leaks.

I have the honour to be, sir,

Your obedient servant,

1907-1908.
Records of Sockeye Ova and Fry at Lakelse Hatchery, 1907 and 1908.

Date.	Ova Collected.	When Eyed.	Commenced Hatching.
1907.  August 8.  10. 12. 14. 16. 17. 19. 21. 23. 24. 24. 26. 28. 129. 131. Sept. 22.	120,000 168,000 328,000 488,000 420,000 144,000 296,000 540,000 272,000 256,000 344,000 176,000 250,000 144,000	September 3  " 9 " 11 " 11 " 12 " 13 " 15 " 18 " 20 " 21 " 24 " 25 " 27 October 1	

Total number of eggs put in hatchery..... 4,414,000

# 6. RIVERS INLET HATCHERY.

RIVERS INLET, B.C., April 22, 1908.

Prof. E. E. PRINCE.

Dominion Commissioner of Fisheries, Ottawa.

SIR,—I have the honour herewith to submit to you my report of the operations at this hatchery for the season, 1907-8.

The run of salmon was very satisfactory, there being a very good showing of fish in all the creeks, and large numbers of them reached the spawning grounds.

We commenced taking ova on September 18, a few fish being in good condition. It was not, however, until October 11 that the fish entered the creeks in any great numbers. From this date, however, we had all we could handle, and finished stocking the hatchery on the 22nd, having secured about 14,000,000 eggs, leaving plenty of fish still in sight when we took out the fences.

The weather was fairly good. There was one heavy freshet at the end of September, which undermined the fence at Quap creek, and caused us to lose the early part of the run. With this exception, we had little or no trouble. The winter was mild throughout and the mean temperature of the water for the season was 37.51 F.

The eggs made favourable and steady progress, and the first that were received were eyed by October 16, with water at a mean temperature of 47. The first young fish showed on November 30, 74 days from receipt of the eggs, and the first lot of

young fish were placed in the pond on February 15. All the fry, with the exception of 2,000,000, put into the Wannock river and the lake, passed through the ponds where they seemed to thrive and were in very good condition when they passed into the lake

The last of the fry, about 100,000, were put out on May 30, making a total of

12,300,000 for the season's work.

I have the honour to be, sir,
Your obedient servant,
ROBT. C. BUCKNALL,
Officer-in-Charge.

## 7. NIMPKISH HATCHERY, B.C.

NANAIMO, B.C., April 2, 1908.

Professor Edward E. Prince, Commissioner of Fisheries, Ottawa.

SIR,—I have received the following report from the British Columbia Packers' Association of the take and output of their hatchery on the Nimpkish:—

'We commenced to take sockeye eggs on the 8th day of October, 1907, and filled all our baskets and the hatchery to its capacity by the 31st of same month, taking 5,017,000 eggs.

'No trouble of any kind was experienced after stripping, only 102,000 eggs being

lost and 500 dead fry, being a little over 2 per cent loss.

'We commenced to put out the strong swimming fry on March 16, and planted

the last on April 8.

'The quantity of sockeyes that spawned naturally was not so large as last year. A much larger quantity of eggs could have been taken if the hatchery had been of greater capacity.'

I am, sir,
Your obedient servant,
EDWARD D. TAYLOR,
Inspector of Fisheries.

# 8. BABINE HATCHERY, B.C.

BABINE, B.C., April 15, 1908.

Professor E. E. PRINCE,

Dominion Commissioner of Fisheries,

Ottawa.

Sir,—I have the honour to submit my report from this hatchery for the past

The water was turned into the hatchery October 5, and I immediately started spawning and the bringing down of the 2,994,000 eggs which I had held in the creek at the head of the lake for over a month. I also spawned all the fish I could catch both at the head of the lake and at the hatchery, but as most of the fish were 'spent' I only secured an additional 1,830,000, which made a total of 4,824,000, which were

8-9 EDWARD VII., A. 1909

put in 36 troughs and all hatched with the exception of 160,000 dead eggs that were picked out.

Our first spawning was September 4, and our last October 16.

Our first shipment started hatching on November 18, at 75 days, and our last shipment started hatching on March 6, at 133 days.

Our highest temperature was 49 degrees and our lowest 35 degrees.

The Babine hatchery is situated on Salmon river, one of the principal sockeye salmon rivers on Babine lake, but, owing to all the early fish going up Salmon river and on through Gourdeau lake to the creeks at the head, Salmon river cannot be successfully fenced till late in the season. The hatchery is situated about 700 feet from Gourdeau lake, in a good sheltered spot with lots of good clear water taken from the lake.

There is an unusually large percentage of dead eggs in Salmon river as, I think, too many fish spawned in the creek this year, and we have no high water in the fall or winter, the bottom of the creek is covered with rotten salmon and big bunches of dead eggs covered with fungus.

There is also a great variety of water insects and no doubt some of them attack the eggs.

We started putting out the young fry on March 30 and distributed them in all the suitable places in the creek, and had them all out by April 15, a total of 4,663,000. They all went out in splendid condition, as they only had to be taken a short distance.

There are no trout or ducks in the creek at this time of the year, and so the young

fry have a good chance.

I am, sir, Your obedient servant,

A. W. PRETTY,

Officer-in-Charge.

# 9. STUART LAKE HATCHERY.

STUART LAKE, B.C., January 15, 1908.

Professor E. E. PRINCE,

Dominion Commissioner of Fisheries, Ottawa.

SIR,—I herewith have the honour to submit my first annual report on the Stuart

Lake hatchery.

This hatchery was built by Mr. Nicholson, of Greenwood, under the superintendence of Mr. Brunel, of Ottawa. It is situated on the portage between Babine and Stuart lakes. Its water supply is taken from Cunningham creek, which flows out of Cunningham lake, a mile above the hatchery, and runs into Stuart lake, two miles lower down. The hatchery is a log building, 40 feet by 90 feet, built on the Red river style, upright posts for the walls every 19 feet. The logs, which are squared on four sides, are morticed into the posts. It is chinked with moss between the logs and plastered on the outside with mud. This makes a very warm and substantial building, lighted by eighteen large windows As there are no skylights, it is necessary to pick with lamps all through the day. Storm shutters and storm doors are also provided, which are of great assistance in keeping the hatchery warm. The hatching apparatus is very much the same as that of Pemberton hatchery. There is a head tank which runs down one side, the entire length of the building, 18 inches by 18 inches, built of

2-inch lumber, 56 troughs, placed in groups of four, with a fall of 9 inches between the upper and lower pair; each trough is 16 feet by 16½ inches wide, and built of 1-inch by 8-inch lumber. They each hold six baskets, 16 inches by 24 inches. A waste ditch at the end of the lower troughs, 11 inches by 7 inches, runs the entire length of the building, and empties outside into a small spring which flows into the main creek. If have a large heater at each end of the hatchery which I find keeps the building sufficiently warm. The dwelling-house is also a log building, built on the same style as the hatchery. It is 26 feet by 32 feet, and contains: kitchen, 13 feet by 14 feet; dining-room, 17½ feet by 13 feet; three bed-rooms; two rooms, 10 feet by 12 feet, and one 12 feet by 12½ feet. There is also a store-house, 13 feet by 17 feet. I must say that the work done here by Mr. Brunel is creditable both to the department and himself.

On July 11, Mr. Nicholson and crew, and myself and staff, arrived at Babine portage. In the meantime, Mr. Brunel was locating the site for the Babine hatchery. On the 15th I left with three men for 15-Mile creek, on Babine lake. On the 17th we started putting in our fence, but were very much handicapped in not having any lumber to work with. Everything had to be cut out of the woods and used in its rough state. Up to this time there were no salmon to be seen in either creek or lake. On July 23, Mr. Brunel came down, and I left with him for Stuart lake, to locate the site for the hatchery. After exploring all the creeks on Stuart lake, we came to the conclusion that Cunningham creek was the only one suitable for a site. On August 3, on getting back to 15-Mile creek, I found the fence completed; a few salmon were in the creek, but these were in an unripe condition. On August 15, I left for 4-Mile creek, and on arrival found the creek full of salmon, all in very good condition for spawning. On the 18th, we started spawning, and by September 15 had secured 2,500,-000 eggs, which were taken over to the hatchery and planted in Cunningham creek, as we had no way of keeping them. Up to this time I had only 85 baskets and very few trays for packing the eggs. On October 5, I again left for 15-Mile creek with Messrs. Rodd and Robertson and one Indian. We started spawning on the 10th and by the 15th had secured 2,600,000 eggs. By this time the few salmon remaining in the creek had spawned. The eggs were placed in the hatchery on the 20th, the water being turned on then for the first time, and are in very good condition, considering that they had to be brought 15 miles by canoe and 9 miles by pack-horse. There would not have been the least trouble in procuring the full capacity if the hatchery had been completed earlier. The Indians up here, so far, have caused no trouble, and I find them very good workers, and also fair and just in their dealings. I would like to say that the staff of four have done their best to make a success of the season's operations.

I have the honour to be, sir,

Your obedient servant,

HENRY GIBBS,

Officer-in-Charge.

## 10. SANDWICH HATCHERY, ONT.

Sandwich, April 20, 1908.

Prof. E. E. PRINCE.

Dominion Commissioner of Fisheries, Ottawa.

Sm,—I beg to submit my annual report of the operations conducted at the Sandwich hatchery for the past season.

We commenced fishing the first week in November, having fishing stations along the Detroit river and in the Bay of Quinté and Lake Ontario.

We collected 124,700,000 whitefish eggs, at the following places:-

Bay of Quinté (Belleville)	33,750,000
C. W. Gauthier (Fighting Island)	54,120,000
Fisheries operated by department (Detroit river)	36,830,000

124,700,000

One hundred million of these eggs were placed in the hatchery and 24,700,000

were shipped to Selkirk.

The fish were captured in seines by the fishermen and kept in racks until ready for spawning. Under my supervision they were then spawned in large tin pans, impregnated, put in tubs and conveyed by steam tug Ranger to the hatchery; they were then placed in glass hatching jars and kept in perpetual motion until hatched, the water being the same temperature as the river. The hatching period averages about five and a half months.

Mr. William Hill superintended the collection of whitefish eggs in the Bay of Quinté.

The first eggs arrived by railway from Belleville on November 6, when the hatchery was opened. Shipments from this point were received from time to time until November 22.

The first eggs were taken in the Detroit river on November 12. It will be observed that the spawning of whitefish in Lake Ontario is somewhat earlier than in the Detroit river.

I am, sir, Your obedient servant,

WILLIAM PARKER,
Officer-in-Charge.

#### 11. OTTAWA HATCHERY.

OTTAWA, April 26, 1908.

Professor E. E. PRINCE,

Dominion Commissioner of Fisheries,

Ottawa.

SIR,—Herewith I have the honour to submit my annual report of the operations carried on at the Ottawa hatchery during the season 1907-8.

The following is a list of the eggs received:—

November 13, 1907, from William Armstrong, at Wiarton, 1,000,000 salmon trout eggs.

November 14, 1907, from Inspector Finlayson, 50,000 ouananiche eggs.
January 7, 1908, from Inspector Finlayson, 70,000 speckled trout eggs.
January 24, 1908, from Inspector Finlayson, 400,000 salmon trout eggs.
February 12, 1908, from Inspector Finlayson, 200,000 Atlantic salmon eggs.
March 4, 1908, from Wm. Parker, 300,000 eyed whitefish eggs.
March 31, 1908, from Grand Falls, N.B., 175,000 eyed Atlantic salmon eggs.
April 7, 1908, from Bark river, 80,000 speckled trout eggs.
May 28, 1908, from Wm. Parker, 700,000 pickerel eggs.

All of which were laid down in the incubating troughs and jars, hatching out strong healthy young fry in the latter part of May and beginning of June. For distribution see Report of Department of Marine and Fisheries ,Fisheries Branch, for the year 1907.

The hatchery is at present undergoing repairs, which, when completed will leave

us in readiness for the coming season's operations.

In conclusion, I might add that during the year the hatchery has been visited by nearly 25,000 interested visitors, many of whom came in at regular intervals to watch the different stages of development.

I have the honour to be, sir, Your obedient servant,

> JOHN WALKER, Officer-in-Charge.

### 12. NEWCASTLE HATCHERY, ONT.

NEWCASTLE, April 29, 1908.

Prof. E. E. Prince,
Dominion Commissioner of Fisheries,
Ottawa.

DEAR SIR,—I have the honour to submit to you my report of the operations carried

on at this hatchery during the past year.

According to instructions received from the department at Ottawa, myself and the usual assistants arrived at Wiarton on October 1. As it is an annual occurrence it usually takes from ten days to two weeks to have everything ready for driving our stakes to set nets, &c., we were ready by the 12th to commence work and by the 21st we had all our nets set ready for operations to secure our supply of salmon trout ova.

I am pleased to inform the department that while we had some rough and stormy weather, on the whole we have had no better success in any season since I have had charge of the Newcastle hatchery. It is usually difficult to secure a sufficient

number of male fish, but this season they were exceptionally plentiful.

By November 12 we secured the usual supply for Ottawa and Mt. Tremblant, and on that date I handed over Mr. Walker 800,000 for Mt. Tremblant and 1,000,000 for the Ottawa hatchery, and by the 20th we had a full supply for the Newcastle hatchery of first-class eggs in good condition. We also left about a half million at the hatchery in Wiarton, not having any room for any more at the Newcastle hatchery.

On the whole our operations at Wiarton were satisfactory, but if the work is to be carried on at that point another season it will be necessary to build a new spile driver as the one we now have is practically useless. Last season owing to the kindness of Messrs. Porter and Kastner we were able to hire a scow, which proved satisfactory, but as they are this season building docks at Southhampton and other places

22-18

8-9 EDWARD VII., A. 1909

they will require all the scows they own and will not be able to place any at the dis-

posal of the department.

Our nets, by a little repairing, will do for another season. All other requirements, such as spawning and other boats are in good condition for another year and safely housed at the Wiarton hatchery. For distribution see Fisheries Report for year 1907.

I have the honour to be, sir, Your obedient servant,

WM. ARMSTRONG.

### 13. GEORGIAN BAY HATCHERY.

WIARTON, ONT., April 30, 1908.

Prof. E. E. PRINCE,

Dominion Commissioner of Fisheries, Ottawa, Ont.

SIR,—In accordance with the rules of the department and in compliance with your instructions, I beg leave to submit my annual report of the operations at the

Dominion hatchery under my charge for the year 1908.

According to instructions I proceeded with my assistants to the fishing grounds at Tobermory and the Duck Islands, to secure a supply of eggs for the hatchery on October 14 and returned to the hatchery on October 31 with 5,500,000 salmon trout eggs, which hatched out successively between March 1 and April 5, and were planted between May 5 and June 3.

I have the honour to be, sir, Your obedient servant,

> A. J. McNAB, Officer-in-Charge.

# 14. MAGOG HATCHERY, P.Q.

Magog, April 2, 1908.

Prof. E. E. PRINCE.

Commissioner of Fisheries,

Ottawa, Ont.

SIR,—In transmitting you my annual report on the operations of this hatchery for the season of 1907-8, I take the pleasure in informing you that the grey trout eggs collected in Lake Memphremagog in October and November, 1907, number 1,250,000. For distribution see Fisheries Report for 1907.

In March, 1908, I went to Grand Falls, N.B., in company with inspector A. Finlayson and received from the Grand Falls hatchery 100,000 salmon eggs which

I conveyed to the Magog hatchery in a very good condition.

In the fall of 1907 numerous repairs were made to the hatchery,—painting of same outside, new penstock repairing troughs and painting of trays, &c., &c. I also had a house built on the shore of Lake Memphremagog at Georgeville last October,

1907, for the purpose of getting spawn, and now I am very well equipped for the above operations.

I remain, sir,

Your obedient servant,

L. L. DESEVE,
Officer-in-Charge.

# 15. MOUNT TREMBLANT HATCHERY, P.Q.

LAKE TREMBLANT, June 26, 1908.

Professor E. E. PRINCE,

Dominion Commissioner of Fisheries,

Ottawa.

SIR,—I have the honour to transmit my report of the operations at Lake Tremblant hatchery for the season of 1907-1908. The following quantities of eggs were received in good condition:—

Salmon trout eggs, 650,000; speckled trout eggs, 80,000; Atlantic salmon eggs, 52,000.

I may state that the distribution was very satisfactory, despite the great heat and the difficulties of communication.

I have the honour to be,

ALPH. ROBERT.

#### 16. BALDWIN'S MILLS HATCHERY AND PONDS.

BALDWIN'S MILLS, P.Q., April 9, 1908.

Professor E. E. PRINCE,

Dominion Commissioner of Fisheries,

Ottawa.

SIR,—It gives me much pleasure to submit my annual report on the operations of the Lake Lester hatchery, under my charge, as per your instructions, for the past year.

The collection of eggs from the speckled trout amounted to 150,000, 50,000 of which were sent to the Ottawa hatchery, the balance retained on the hatching trays here

The following fingerlings, yearlings and fry were distributed to the various waters:—

### Speckled Trout-Fingerlings.

October and November, 1907-

Sunny Mead pond	5,000
Lake Torture	15,000
Trout lake	

25,000

# Atlantic Salmon-Fingerlings.

October and November, 1907—  Lake Lester	10,000 15,000
	25,000
Grey Trout—Fingerlings.	
October and November, 1907—  Lake Memphremagog	105,000 105,000
	210,000
Salmon Trout—Fingerlings.	
October and November, 1907—  Lake Memphremagog	16,000 16,000 10,000 42,000
RECAPITULATION.	
Speckled trout—Fingerlings.  Atlantic salmon—Fingerlings.  Grey trout—Fingerlings.  Salmon trout—Fingerlings.	25,000 25,000 210,000 42,000
Grey trout—Yearlings	302,000
Total	. 312,000

The distribution was successfully done and fish deposited in good condition.

I have the honour to be, sir,

Your obedient servant,

W. G. BELKNAP,

Officer-in-Charge.

## 17. TADOUSSAC HATCHERY, P.Q.

TADOUSSAC, April 4, 1908.

Prof. E. E. PRINCE,

Dominion Commissioner of Fisheries, Ottawa.

SIR,—I have the honour to submit my twenty-third annual report on the salmon breeding operations at Tadoussac. Of the 570 parent salmon spawned last season 325 were females, from which we collected 3,360,000 eggs. No eggs were sent to Roberval last fall, the hatchery of Mr. H. J. Beemer being closed.

I have the honour to be, sir,

Your obedient servant,

L. N. CATELLIER.

### ST. ALEXIS HATCHERY.

### Eggs Collected, Season 1907.

Lac à la Loutre	15,000
Lake Violon	10,000
Lake Simpson	25,000
Dickerman stream	275,000
Lake Shawinigan	300,000
Received—	
Salmon eggs	95,000
Ouananiche eggs	55,000
Whitefish eggs	135,000
Total	910,000
Fry distributed	717,000
Fry shipped to department	100,000
Bad eggs	93,000
Total	910,000

# 18. GASPE SALMON HATCHERY, P.Q.

Gaspé, P.Q., April 15, 1908.

Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual report upon the operations of the

Gaspé salmon hatchery during the past season.

On October 27 last I went to St. John, N.B., for the quota of eggs, receiving (9) nine cases. On my return home I received (2) two more cases from the Miramichi retaining pond, making (11) eleven cases in all, and reached home on Sunday night, November 3. The next day the eggs were placed in the incubation troughs in excellent condition, with very few dead ones, which were at once picked out.

The ova from Miramichi did not seem to do as well for the first two months as the St. John lot, a few more dying, but after January set in they were all right and

did as well as the others.

Again this year the fry hatched out very late, especially the Miramichi lot, which were only turned off the trays on May 28, but the weather turning warm they developed very rapidly, and I began distributing them in the rivers on the first day of July, and, owing to the continued fine weather and good state of the water in the rivers, I am making excellent progress with the work, and hope to get through by the 22nd instant. I will have at least (1,600,000) one million six hundred thousand for planting this year.

The hatchery requires painting very badly on the outside, as well as some repairs to the shingles on the corners of the roof, which cannot be let go for another year, as it is rotting the building. The ceiling on the inside behind the large water trough is also badly bulged and will have to be repaired before the cold weather comes on.

As I stated in my report last season, there is a number of dead trees in the pond that will have to be removed, as some have fallen, and the rest will soon be down, and are making a lot of dirt that will stop the strainers. The water never got low enough last year to have them removed. But I will have it done after finishing the distribution this year, as the water is getting quite low already.

The troughs, trays, cans, &c., will be cleaned and varnished for next season's

operations as soon as possible after we finish planting the fry.

In my opinion the government would do well to pay a good bounty for king fishers, sheldrakes and cormorants, as all three are very destructive to the young salmon coming out of the rivers, especially the cormorants. I have known as many as thirty young salmon to be taken out of two cormorants, 17 from one and 30 from another. There are thousands of those cormorants in the mouths of our rivers every day, and the destruction they are making is a serious loss to the salmon fishing in general.

The lumber companies are also spoiling our rivers very much by baring the channels and filling them up with logs and dirt, so much that it is impossible for the salmon to pass up, especially the York river, which, if some change is not made soon,

will be completely destroyed as a salmon river.

I have the honour to be, sir, Your obedient servant,

R. LINDSAY,
Officer-in-Charge.

### 19. RESTIGOUCHE HATCHERY.

FLATLANDS, NEAR CAMPBELLTON, N.B., April 15, 1908.

Professor E. E. PRINCE,

Dominion Commissioner of Fisheries,

Ottawa.

SIR,—I have very much pleasure in submitting to you my annual report upon the

operations of the Restigouche hatchery during the season of 1907-8.

Two hundred and forty-five stock fish were captured in the government and the two licensed nets, engaged for the purpose last year. One of the licensed nets hired by the department was not set. It obstructs the passage of the fish to the government net, and when not set admits of many fish being taken for the hatchery, which otherwise would go into the market.

The rivers last year were kept continually in flood by the unprecedented rainfall, making it very difficult to operate the government net, or distribute fry by towing up the rivers. Very few fish ascended the river in June, and owing to such high water the fish could not be caught by either netters or anglers, consequently the catch at government stand was somewhat reduced. The fish in the retaining pond kept healthy and none were lost.

The operation of gathering the eggs began on October 18, and completed on November 10, some 1,250,000 eggs were collected and safely deposited in the nursery troughs. The loss during period of incubation did not exceed 6 per cent.

### Miniature Retaining Ponds.

Wherever possible, these ponds or tanks ought to be adopted near the heads of rivers, and the eggs conveyed there in the spring months, just a few days in advance of the tiny fish bursting the shell, and cared for in these tanks until the fry are about ready to take food, when they can be distributed in the most sheltered places up and down the river. It is by far the best possible system in connection with the work of fish culture, and the most economical, and certainly the fry will be deposited in a healthy and proper condition, which is the keynote, so to speak, in the whole work of fish culture. I have recommended the adoption of such a system in my reports many years ago.

Some minor repairs to the hatchery and buildings at Tide Head pond will be necessary. The men engaged to guard the pond will perform any of the work it is

possible to do.

All trays and plant will be revarnished and the necessary preparations made for the reception of the large supply of ova which will be available this fall.

I am, sir,

Your obedient servant,

ALEXANDER MOWAT,

Fishery Officer, Officer-in-Charge of the Hatchery.

For distribution see Fisheries Report for 1907.

### 20. ST. JOHN RIVER HATCHERY, N.B.

GRAND FALLS, N.B., April 3, 1908.

Professor E. E. PRINCE

Dominion Commissioner of Fisheries, Ottawa.

SIR,—I beg to submit the following report on the operations carried on at the St. John River hatchery during the past season.

On October 30, 1907, I went to St. John for my quota of salmon eggs, returning on November 4, with the first shipment. I went again to St. John on November 7 and returned on November 8 with balance of eggs. These were all put down in the troughs in excellent condition. There was very little loss either during incubation or after hatching. In fact, I have never seen young fry as strong at the age of three weeks. We had no loss whatever in the shipping, and 1,800,000 salmon eggs were laid down in the hatchery troughs. Mr. Finlayson, Dominion Inspector of Fisheries, took from here four cases, containing about 250,000. He also brought one case of salmon trout eggs.

Table of distribution will appear in my next report.

I am, sir,

Your obedient servant,

F. J. McCLUSKEY, Fishery Officer.

## 21. MIRAMICHI HATCHERY, N.B.

South Esk, N.B., April 6, 1908.

Professor E. E. PRINCE

Dominion Commissioner of Fisheries, Ottawa.

SIR,—I beg to submit the following report on the operations at this hatchery since September 1, 1907.

The new hatchery which was in course of erection at the time my last annual report was forwarded, was completed in time to receive the supply of ova during the first week in November. The building, which is 75 feet long by 30 feet wide, with a spacious portice in front, presents a very pleasing appearance. It is well lighted with 30 large windows, fitted with the latest improvements. Ventilation is also well provided for. The interior walls and ceiling are plastered, and the plaster near the floors is protected by being covered with matched sheathing, four feet in height, which is finished in oil. The supply tank, hatching troughs and waste tanks are built of the best timber that could be procured, and being well put up are thoroughly water-tight. There are 50 hatching troughs in all, 40 of which are 18 feet long and the remaining 10 are 12 feet long. This number of troughs can contain over 500 ordinary hatching trays, or, in other words, there is sufficient space for safely carrying and hatching from two to two and one-half millions of ova. The water supply is obtained from the

pond which operated the old hatchery, and is conveyed to the supply tank through an 8-inch iron pipe. The exterior walls and roof are shingled with best quality shingles, and the walls painted with three coats white paint, with green trimmings.

The cottage which was erected for the officer in charge, and which was completed during the first week in January, is situated near the hatchery. Although this building is small, the interior is conveniently arranged and well finished, having a basement 23 feet square, and is heated throughout by hot air furnace. The exterior is shingled and the walls and roof painted to correspond with the hatchery building. This season it will be necessary to do some grading on the grounds fronting the buildings and to remove considerable refuse and old lumber that accumulated during the building operations. Some of the tanks, troughs and fittings will also require painting. This work could not be done last fall, as the cold weather and snow came on before it could be completed. When this work is performed the hatchery and surroundings will make a very creditable appearance, and will be one of the most modern establishments of the kind in the maritime provinces.

During the latter part of August, the retaining pond at the hatchery was put in readiness to receive the supply of parent fish. The dam which was badly damaged by the spring freshets was repaired, and several other small improvements made. Arrangements were then made with fishermen near the hatchery to operate four nets to supply this pond. These nets were put in operation on September 15, and in 12 days 845 salmon were obtained therefrom and placed in the retaining pond. While this work was being carried out, instructions were received to procure about 700 additional fish with which to supply other hatcheries. As the pond here then contained as many fish as was thought could be safely carried, and as there was no chance to enlarge it while the fish were enclosed, it was decided to erect another temporary pond at Tide Head, 12 miles distant from the hatchery, and to procure the required number of fish by seining in the same manner and under the same arrangements as obtained before the purchase of parent fish was inaugurated at this hatchery. Owing to continuous rains, the water in the upper parts of the rivers became very high shortly after the seining operations commenced, and only 350 fish were obtained in this manner, consequently the licensed stands were again put in operation and in a few days 280 more fish were taken by them and conveyed to Tide Head, making a total of 630 fish placed in this pond. As the number of fish then in both ponds amounted to 1,475, and as instructions had been received that this number would supply all requirements, the fishermen were directed to remove their nets, which they did on October 11. Twenty-five of the fish that had been slightly injured in the nets were liberated before spawning time. The collection of ova commenced on October 25. On October 28, Mr. Burgess, of Windsor, arrived here, and on the 31st he returned with one million ova, which were delivered to him at the railway station at Newcastle. Three days later 260,000 were delivered to Mr. Robt. Lindsay, at Newcastle, for the Gaspé hatchery. And on the same day Mr. A. W. Holroyd arrived for the supply for Charlottetown hatchery. This lot, consisting of about 900,000, was delivered to Mr. Holroyd at Newcastle on November 6. As there was then no further orders for other hatcheries, the work of putting the supply in this hatchery was commenced, and was continued very successfully until the evening of November 9, when a heavy freshet came on. The water raised fully 10 feet, and it was impossible to continue the work at the ponds. The water remained high during the 10th and 11th, and on the 12th it was decided to seine as many fish from the ponds as possible and place them in pontoons. This was extremely difficult, and as it was raining continuously, the water rose to a point over two feet higher than the structures enclosing the fish, thus allowing about 120 to escape from the pond at Tide Head and 225 from the pond at the hatchery, making a loss of 345 at both places. The fish that had been placed in the pontoons were then stripped as quickly as possible, under very trying conditions, as the weather had turned cold and the rivers began to freeze over. The

8-9 EDWARD VII., A. 1909

work was completed on November 17, over two millions of ova being placed in this hatchery. The number of fish stripped was 720 females and 385 males, making a total of 1,105. The total number of ova collected during the season amounted to 4,200,000, divided as follows:—

Windsor hatchery, Nova Scotia	1,000,000
Gaspé hatchery, Quebec	
Charlottetown hatchery, Prince Edward Island	900,000
Miramichi hatchery, New Brunswick	2,040,000
Total	4,200,000

It had been arranged to supply the Restigouche hatchery with about 1,000,000 ova, but owing to the loss of parent fish caused by the flood, as already stated, it was found

impossible to do so.

The ova were placed in this hatchery in good condition and continued to do well without any more than ordinary loss until the last week of January. Then large numbers began to die in some of the troughs and had to be removed from the trays. This work was seriously interfered with during the first week of February, as owing to almost continuous rains and freshets, large quantities of sediment was carried into the troughs and the water was so muddy, it was impossible to pick out the bad ova. The hatchery and ova was inspected by Mr. Finlayson on February 10. He selected 200,000 healthy ova, and transferred them to Ottawa, where part of them were to be repacked for shipment to New Zealand. He was accompanied by an officer who was in charge of this shipment, on the long journey across the Pacific. After Mr. Finlayson's visit the ova was thoroughly washed and cleaned. The total number picked out up to March 1 being 470,000. From that date until hatching time no serious loss was met with, about 45,000 being removed in that time.

With regard to the procuring and retaining the supply of parent salmon, the experience gained last year proves that it will be much better to have only one pond sufficiently large to contain 1,500 fish, situated as near the hatchery as possible, instead of operating two small ones 12 miles apart, as last year. A pond can be easily arranged a short distance from the site hitherto used, which is becoming filled up with sand and refuse, by selecting a portion of the cove into which the stream that runs by the hatchery empties. The bottom is clean and gravelly and the fish will be benefited by the tides which enter here every day, raising from 4 to 8 feet. Another advantage will be that there will be no danger of loss by freshets. An enclosure can be made in the same manner as at the old ponds around as large a space as thought necessary to contain 1,200 to 1,600 fish. No further expense will be incurred in doing this than the cost of material for fencing and the labour putting it into position. The fish can be obtained from stands within one-quarter to one mile from this pond and can be placed therein at every tide.

The distribution will appear in my next report.

I am, sir,

Your obedient servant.

ISAAC SHEASGREEN.

#### 22. BEDFORD SALMON HATCHERY.

BEDFORD, N.S., April 29, 1908.

Professor E. E. PRINCE,

Dominion Commissioner of Fisheries,

Ottawa.

SIR,—I beg to submit the following report of operations at the Bedford hatchery for the past season, distribution appearing in my next report.

In November last, I obtained at the St. John retaining pond 300,000 salmon eggs. The speckled trout eggs were secured from the following places:—

Bulmer's pond,	Sackville, N.B	50,000
Williams' lake,	Halifax county, N.S	10,000
Phinney's pond	, Annapolis county, N.S	3,000

An effort was made last season to secure trout eggs from some of the larger lakes where the fish are large and plentiful, but owing to the heavy freshets during October and November none could be captured. Another effort will be made this fall, which I trust will be more successful.

I have the honour to be, sir,

Your obedient servant,

ALFRED OGDEN.

### 23. WINDSOR HATCHERY, N.S.

WINDSOR, N.S., April 2, 1908.

Professor E. E. PRINCE,

Dominion Commissioner of Fisheries,

Ottawa.

SIR,—I beg to submit herewith my third annual report.

In October, 1907, I went to new retaining pond on Miramichi river, and there obtained 1,000,000 salmon ova.

The same were laid down in good condition in the hatching troughs.

The ova were all hatched early, and the distribution will appear in my next report.

next report.

I have the honour to be, sir,

Your obedient servant,

FRANK BURGESS.

# 24. MARGAREE HATCHERY, N.S.

N. E. MARGAREE, N.S., April 20, 1908.

Professor E. E. Prince,

Dominion Commissioner of Fisheries,

Ottawa.

Sir,—In response to a recent departmental circular, I beg leave, most respectfully, to submit my annual report of the fish cultural operations conducted in Margaree

hatchery for the season of 1907-8.

During the summer of 1907, the terra-cotta pipe that conducted water to the troughs, never having given satisfactory service, referred to in detail in previous reports, was removed and replaced by iron pipe, 6 inches diameter. The work was conducted under the able management and counsel of Alex. Finlayson, Esq., Inspector of Dominion Hatcheries. It will be necessary, however, to have several hundred feet more of similar pipe placed in position, as not having sufficient to obtain a suitable head of water, two dams had to be erected; and, as violent freshets are of frequent occurrence, these dams are often giving away. Last season they had to be repaired several times. By having additional pipe, they can be dispensed with altogether, and this yearly expenditure for repairs saved. I trust by another year this work will be accomplished.

Early in November, 1907, I received 1,690,000 salmon ova from the government retaining pond at St. John, N.B. They arrived at the hatchery in first-class condition

and were at once placed in the troughs.

In the routine work, past seasons, one of the questions that troubled us most was the handling of sediment successfully. Owing to a system of filters that I devised I have to report with pleasure, that during the past season there was no occasion whatever to wash or sprinkle the ova at any time. All through the season they remained as bright as when first placed in the troughs.

Notwithstanding careful daily picking, at one time the ova was threatened with an epidemic of fungus, but by the timely and judicious use of *Potassii Permanganas*, somewhat on the lines laid down and recommended by yourself in one of your reports

on fish culture, within a few days all appearance of it entirely disappeared.

From November to May, the daily average temperature of the water in the supply tank was 39° F. The period of incubation was therefore very much shorter than usual. Hatching commenced about February 20, and was completed about March 25. The resultant fry were very vigorous and healthy, and without doubt were the best lot ever hatched here, both in the activity of the alevins and in the small percentage of loss.

I have the honour to be, sir,
Your obedient servant,
ALEX. GEO. CARMICHAEL.

## 25. KELLY'S POND HATCHERY, P.E.I.

WINDSOR STATION,

Professor E. E. PRINCE,

Dominion Commissioner of Fisheries,

Ottawa.

SIR,—I beg to submit my report of the operations at Kelly's Pond hatchery for the season of 1907-8.

I am pleased to say we had the most successful season in the history of the hatchery. On November 6, I secured 950,000 salmon eggs from Miramichi retaining pond, and put them in the hatchery in fine condition. On December 25, Mr. Rodd, of the Department of Marine and Fisheries, brought me 50,000 trout eggs, which were also put down in fine condition. The salmon began to hatch on February 20, and the trout on February 1. I am pleased to say we lost very few salmon eggs during the hatching season, and of the 50,000 trout, I may say we did not lose 50.

I am, sir,

Your obedient servant,

A. W. HOLROYD.

# 26. ST. JOHN SALMON POND, N.B.

St. John, N.B., March 23, 1908.

Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SR,-In compliance with the request of the department, I herewith present a

report of the season's operations at the Little River Salmon Pond.

On April 17, I received instructions to get the pond ready to receive fish, owing to some necessary alterations being made, we hastened the work and were ready, and did receive 23 fish by July 5, and continued taking them until August 22, by which time we had received some 1,250 adults and 50 grilse. During the taking of fish we lost some by death, but a much smaller percentage than last year, and I have every reason to believe that the loss next season will be practically 'nil.' During the summer we lost a few more, but only what might be expected, from the impounding of so many. Some died from fungus and some by accident. Taken as a whole, the fish were a fine lot, averaging about 13½ pounds each. We also received about 35 that were exceptionally large, weighing from 20 to 35 pounds each. It is interesting to note that these large fish are more plentiful now than they were ten years ago, whether this can be attributed to the careful liberating of the fish from the pond, about 1,000 each year, or not, is a question, but I rather incline to that belief, as when matured fish are liberated that weigh from 12 to 15 pounds, it is reasonable to believe that when they return two years later, as they do, that consequently they must be larger.

We commenced stripping on October 26, the fish being quite ripe, in fact, it was so much earlier than last year that we were afraid that some of them would lose their

8-9 EDWARD VII., A. 1909

eggs in the pond; however, we got through all right, only finding three spent fish among the lot. On this date we stripped 60 fish, 40 females and 20 males, getting from same about 350,000 eggs. The same staff being employed as we have had, with one or two exceptions, for the last five years, in fact, the more important work has been done by the same hands since I have had charge of the pond.

Altogether we stripped 760 females, for which we had plenty of milt, and 30 males to spare. We also had 23 bright fish, samples of which were sent to Ottawa. We finished stripping on November 6, and disposed of the eggs as follows:—

Officer McCluskey, Grand Falls, N.B., about	1,800,000
Officer Lindsay, Gaspé, Que., about	1,500,000
Officer Ogden, Bedford, N.S., about	600,000
Officer Carmichael, Margaree, C.B., about	
	5 600 000
Average vield per female.	

The different officers appeared well pleased with our methods and were well satisfied that their eggs left here in good condition.

Respectfully submitted,

I am, sir,

Your obedient servant,

JAMES BELYEA,

Officer-in-Charge, Little River Pond, St. John, N.B.

# APPENDIX No. 14.

# REPORT OF THE FISHERIES PROTECTION SERVICE OF CANADA.

(By Commander O. G. V. Spain.)

OTTAWA, April 15, 1908.

To the Honourable

The Minister of Marine and Fisheries, Ottawa.

SIR,—I have the honour to report on the work of the cruiser fleet looking after the protection of the fisheries of the Atlantic, Great lakes and the Pacific coast.

I also append reports from the officers commanding the various vessels; the list of United States vessels calling at Canadian ports, and also a list of modus vivendi licenses issued to United States fishing vessels during the fiscal year 1907-8.

Nearly all these United States vessels were boarded and reported upon by the

captains of Canadian cruisers.

The vessels comprising the fleet and their commanding officers were as follows:-

Canada, Captain Knowlton.

Vigilant, Captain Dunn.

Curlew, Captain Robinson.

Osprey, Captain Graham.

Constance, Captain May.

Princess. Commander Wakeham.

Petrel. Captain Kent.

Kestrel, Captain Newcomb.

Falcon. Inspector Williams.

The patrol of these vessels during the last season were as follows:-

The Canada on the Nova Scotia and Cape Breton coast. The Vigilant on Lake Erie. The Curlew in the Bay of Fundy. The Osprey on the southeast coast of Nova Scotia. The Constance in the river and gulf of St. Lawrence, and the Nova Scotia coast. This vessel is controlled by the Customs Department in everything regarding her movements.

The *Princess* works independently of the rest of the fleet, under the command of the officer in charge of the Gulf Division of Fisheries. She patrols the Labrador coast, Bay des Chaleurs and the Magdalen islands.

The Petrel, in Prince Edward Island waters, with headquarters at Souris or

Georgetown.

The Kestrel is employed in British Columbia waters. The work that this vessel has to perform is over a very large territory. It is impossible for her to carry it out satisfactorily, and it is proposed to build a faster and more modern vessel to assist in patrolling these waters.

The Falcon is a small vessel employed in British Columbia, principally in look-

ing after the inshore fisheries, under Inspector Williams.

In addition to the above, there are three steam launches, which are principally used in looking after the carrying out of our laws by our own fishermen, more especially in regard to the protection of the lobster fisheries.

8-9 EDWARD VII., A. 1909

The work performed by the various ships under my command have been satisfactory, and my thanks are due to the officers and men of the service.

I have the honour to be, sir,

Your obedient servant,

O. G. V. SPAIN,

Commander, Marine Service of Canada.

List of Licenses issued to United States Vessels during the fiscal year ended March 31, 1908.

Name of Vessel.	Port.	Amount Paid.	Name of Vessel.	Port.	Amount Paid.
		\$ ets.	Total day of the control of the cont		\$ ct
Quickstep	Boston	112 50	Thomas S. Gorton	Gloucester	138 0
Blanch	Gloucester	117 00	T. M. Nicholson	Bucksport	135 0
Judique Alice R. Lawson		133 50	Alena L. Young	Rockport.	37 5
Alice R. Lawson		127 50	Dictator	Gloucester	138 0
Lizzie Maud	Vinel Haven	72 00	Susan and Mary	Boston	124 5
Margie Turner		66 00	Ralph L. Hall	Gloucester	135 0
	Cranberry Island	69 00	Priscilla Smith		133 5
Essex	Houcester	126 00	Aloha	11	151 5
Fattler.		202 50	Acton	11	25 5
Ralph Russell Maxime Elliott		72 00	Acton John L. Nicholson Tacoma Mildred V. Nunan	H	138 0
Hattie A. Heckman.	11	112 50	Mildred V	(Y 'D. ` `	106 5
Georgiana I	Roston	$\begin{array}{c c} 108 & 00 \\ 130 & 50 \end{array}$	Willdred V. Nunan	Cape Porpise	64 5
Theodore Roosevelt.	Topogeton	135 00	Senator		111 0
Squanto		142 50	Mary Edith		76 5
Agnes	11	112 50		Gloucester	115 5
Margaret		118 50	Joseph H. Cromwell.		73 5
Valkyria	"	160 50	Morning Star Paragon	Lookport	127 50 $120 0$
Margaret Valkyria. George Parker		150 00	Kineo		124 5
Unato It	SOSEON	157 50	Jennie B. Hodgson		127 5
Catherine Burke Metamora	"	I38 00	Grace Darling	Beverly.	70 5
Metamora	11	121 50	Oliver F. Kilham		64 5
Perceptor	iloucester	133 50	Slack Gordon		132 0
Dora A. Lawson	à.	139 50	Niagra.,	11	117 0
Mystery I	Plymouth	117 00	Minitor		150 0
Lucinda I. Londe	iloucester	117 00	Teazer		93 0
Flirt	11	123 00	Arkona		145 5
Cavalier	11	144 00	J. J. Flaherty	H	186 0
Conqueror		15; 00	Aritheesa		160 5
Miranda	17	114 00	Smuggler		136 5
Annie M. Parker	H	150 90	H. A. Nickerson		124 5
Vera	11	115 50	Bohemia	11	129 0
Illinois		117 00	Hazel H. Hines	à	118 5
Illinois Ella M. Goodwin		117 00	Wm. E. Morrissey	11	139 5
Hiram Lowell [1	Puoleman t	129 00	Athlete	11	144 0
Waldo L. Stream	Plongester	142 50 121 50	Georgie Campbell	11	$117 0 \\ 132 0$
	xioucester	118 50	Maggie and May Senator Gardner		141 0
Raymah	Boston.	142 50	Orinoco		132 0
Monitor	Floucester	150 00	Mabel D. Hines		138 0
	11	132 00	Annie M. Parker		150 0
Mildred Robinson I		129 00	Blanche		117 0
Harvard		114 00	Effie M, Morrissey	11	124 5
			Total		10,569 5

# 8-9 EDWARD VII., A. 1909

FISHERIES PROTECTION SERVICE.

List of United States Fishing Vessels which have entered Canadian Ports for the Year ending October 31, 1907, showing Net Tonnage, Crew and number of times each Vessel entered the Several Ports.

	8-9 EDWARD VII., A. 1909
Total Entries.	######################################
Yarmouth.	шн
Whitehead.	а анн i а i i а i i i i i i i i i i i i
Souris, P.E.I.	G1 G1 G2 G2 G2 G2 G2 G2 G2 G2 G2 G2 G2 G2 G2
Shelburne.	H H GAH 60 HH 60 H H 100 H
Port Mulgrave.	
Port Hood.	
Port Hawkesbury.	2 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1
North Sydney.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lunenburg.	
Louisburg.	co m   co m
Госкероге.	
Liverpool.	
Liscomb.	
.xslilsH	H : H03   H   H   H   W   W H   H   H
Georgetown, P.E.I.	
Canso.	
Barrington.	
	H : 01H : 02
Arichat.	6.8 6.5 8.8 8.7 8.8 8.8 8.8 8.8 8.8 8.8 8.8 8.8
Number of Men.	
Ton- nage.	817717875888889500888888888888888888888888888
Name of Vessel.	A. E. Whyland A. L. Sanborn A. M. Nicholson Actor Admiral Dewey Agnes Agnes Alene L. Young Alene L. Young Anerice R. Lawson Aloha Annei Greenlaw Annei Greenlaw Annei Greenlaw Annei Greenlaw Annei An
Zumber.	

801472711229	151 12 20 20 11 11 11 13 13 13 13 13 13 13 13 13 13	40041101	-1987589	929	-1 co ⊖ 10 co F	-0101010000	11-
		-	_		-		

	15	- : : : : : : : : : : : : : : : : : : :	: :- :0-	:01 00 m	1191:::::::::::::::::::::::::::::::::::
					64 : : : : : : : : : : : : : : : : : : :
			::::::	: : 23 : : : :	: : : : : : : : : : : : : : : : : : : :
				:::::::::::::::::::::::::::::::::::::::	
: : : : : : : : : : : : : : : : : : :	4 : : : : : : : : : : : : : : : : : : :	' <del></del>	:00 HH-	12:::01	
	: . : : : :				
:::::::::::::::::::::::::::::::::::::::					
H	:::::::		: . : : : :	1 1 1 1 1 1 1	
	<u>:</u> ::::::				
: ca : : : : : : : : : : : : : : : : : :		: : : : : : : : : : : : : : : : : : : :	: : : : : : : : : : : : : : : : : : : :		
<u>: : : : : : : : : : : : : : : : : : : </u>	:::::::			::::::	
· : : - : - : : :	::-::::::::::::::::::::::::::::::::::::				
		:::::27		::: :	:::::::::::::::::::::::::::::::::::::::
:::::::	: :01 : : : :	: : : .67 :		: : :	
			::::::		
	: : : : : : : : : : : : : : : : : : : :	: : : : : :	: : :		
		::::::			
H2:HH.4::	:::::::::::::::::::::::::::::::::::::::	: - : : - :			
			: : : : : : : : : : : : : : : : : : :	:° : : : : :	: : : - : : : : : : : : : : :
_ : : : : : : : :					
		::::	: = : : : : : : : : : : : : : : : : : :	:	
					· · · · · · · · · · · · · · · · · · ·
. : 00 : : 00 : .	:- :::::	:1:9::	:: 69 :: :		
그 : : : : : = = : :				:::::::::::::::::::::::::::::::::::::::	
		: : : : :	: : : : : :	:::::::::::::::::::::::::::::::::::::::	
= = = : (금 : (3 : )	:::::::::::::::::::::::::::::::::::::::	::01:4:		:::::::::::::::::::::::::::::::::::::::	
	::::::		: : : : :		
: : . : : : :		_ : : : : :	_ : :_ ::	111 111	
	: : : : : : :	::::::		:::HH:::	

 $\frac{213}{2}$ 

 $\frac{c}{c} + \frac{1}{2} \frac{3}{2} \frac{5}{6} \frac{2}{6} \frac{$ 

8-9 EDWARD VII., A. 1903

Total Entries. : - 20 23 Yarmouth. Whitehead. Souris, P.E.L. Sheiburne. Port Mulgrave. Port Hood. Port Hawkesbury. 9 67 North Sydney. Lunenburg. Louisburg. Lockeport. S Liverpool. Liscomb. ্ব ಣ ⊢ Halifax. Georgetown, P.E.I. :07 কা SV Canso. Barrington. .01 Arichat. Number of Men. Ton-Margaret Haskins Marion E. Turner Name of Vessel. Marshall L. Adams..... Iolanthe
James & Esther
James R. Clarke
James R. Crane Merchant..... Madonna Mage Mage Manhassett.... Louisa Polleys... Judique Mabel D. Hines ..... John J. Flaherty..... Jubilee ..... John L. Nickerson... Joseph H. Cromwell.. Joseph W. Luffkin... Jennie D. Hodgdon. M. B. Stetson ..... Lizzie Maud Lizzie M. Stanley.. Lucania....Lucinda J. Lowell. [ngomar..... Juno Lena and Maud Independence II Juniata..... Lottie G. Kineo. Number.

LIST of United States Fishing Vessels which have entered Canadian Ports for the year ending October 31, 1907.—Continued.

			- : : : : :	- C1	- : : : : - : 107	
	,	: : : : :				
		: : : : : : : : : : : : : : : : : : : :		<u></u>	: : : : : : : : : : : : : : : : : : :	
	:	:-:-0-	H 7 H = : 0 :	::000:::	::-:::0::	4
		<u> </u>		2: 1		
			1 - prod	::::		<u></u>
: : : : : : : : : : : : : : : : : : :				::-::		
::- ::::::		-:::::	-::::::			
					: : : : : : : : : : : : : : : : : : :	: : : :
© : : : : : : : : : : : : : : : : : : :	: Пете			: : 67	: : : : : : : : : : : : : : : : : : :	
<u>:</u> н :ю :ннн	:: 04 H	4 : H :Hc	- : <u>:</u> - : <u>:</u> -	40:::-	-     -	
	- : : : : : : : : : : : : : : : : : : :	-:::::		<u>:</u> ⊣ : : : : :	: : : : : : : : : : : : : : : : : : : :	1 : : :
· : : : :		: : : : : :	2 : : : :		: : : : : : : : : : : : : : : : : : :	
				::::-::	: : : ca : : : : : : :	
	· · · · · · · · · · · · · · · · · · ·	-03 : : : : : : : : : : : : : : : : : : :	::::	: i= i= : :	[ [ [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]	· · · · · ·
				24		
	: : : : :	: : : : : :			58275283848 58275283848	: : : : 92888

Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Particon
Par Olga Oliver T. Killam Orinoco ..... Olympia Onato.

11128 1128 1128 1128 1128 1128 1128 1128 1128 1128 1128 1128 1128 1128 1

#### 8-9 EDWARD VII., A. 1909

Total Entries. List of United States Fishing Vessels which have entered Canadian Ports for the year ending October 31, 1907.—Concluded. Yarmouth. Whitehead. Souris, P.E.I. Shelburne. :01 Port Mulgrave. Port Hood. .01 Port Hawkesbury. North Sydney. 07 Lunenburg. Louisburg. . 67 :03 Lockeport. : ସ ସ ସ Liverpool. Liscomb. Halifax. Georgetown, P.E.I. Barrington. :01 Arichat. Number of Men. Ton-nage. Valant. W. H. Ryder. Waldo L. Stream. Terra Nova Senator Salisbury
Sheffyld
Sheffyld
Sheffyld
Smuggler
Smuggler
Speaulator
Sytanto
Susan and May
T. M. Nicholson
T. A. Caronwell
T. M. Nicholson Name of Vessel. Veda McKown Vera Tattler Saladin. Sceptra. Selma. Titania..... Theodore Roosevelt.
Thomas S. Gorton. Senator Gardner ... Talisman Tartor.... Viola Tasmania..... Victor Valkyrie. Senator Valant. Teazer Number.

#### DOMINION CRUISERS—CAPTAINS' REPORTS.

C. G. S. 'CANADA,' HALIFAX, N.S., December 18, 1907.

To Commander O. G. V. SPAIN,

Officer Commanding Canadian Marine Service, Ottawa, Ont.

SIR,—I have the honour to submit to you my annual report of the work done by this ship under my command during the season of 1907.

This ship wintered at pier I. H. M. dockyard, Halifax, N.S., where necessary repairs were made to deck and the engine.

This dockyard was taken over from the imperial authorities by Lieut.-Colonel Gourdeau, Deputy Minister of Marine and Fisheries and yourself, on January 1, 1907, and the Canadian blue ensign was hoisted by the crew of the Canada and saluted in due form.

I was appointed to the charge of the dockyard, and did gate, also patrol duties with the men of the Canada until we took up our usual work of patrol duty, which began on the 12th of May, when by your order we proceeded to Sable Island to inquire into wireless reports from Superintendent Boutillier, of Sable Island, that United States fishermen were fishing within the territorial waters of Canada. We arrived there the following day to find three United States and two Nova Scotia fishermen anchored in the bight of the island for shelter, we boarded those vessels and warned them not to fish within three miles of any part of that island, I also warned the Canadian fishermen not to use purse seines inside, as they could not be used there even by the Canadians, the use of the cod seine having been introduced there for catching pollock and cod. We got back to Halifax on the 14th. A few days later, we took up our regular duties along the southern shore of Nova Scotia awaiting the approach of the United States mackerel seiners, weather being very cold and backward. On the 21st May, the first of the mackerel fleet made their appearance on this coast. We cruised for two weeks off Sambro, going into Halifax and Prospect different times for shelter with the fleet until the 11th of June, while at the former port, I received a message to proceed to Magdalen Islands and see Collector Delaney with reference to United States Banker Henry M. Stanley, proceeding at once, I got there on the following day to find that this schooner had gone some days before. I took the papers which Collector Delaney detained from the Stanley and forwarded same to you, returning at once to my station, found fleet off Halifax, C. G. S. Petrel in company, and heard mackerel had struck the day before, and most of the seiners had barrels on deck which indicated they had taken fish.

On the following morning after our return while fish were schooling in every direction, the seiner Fannie E. Prescott, of Boston, had the misfortune to get within the 3-mile limit and was seized by this ship and taken into Halifax, and I notice by the press, was fined the sum of \$200. This does not seem to be too heavy considering the offence. We remained with the fleet along the coast though somewhat scattered until by your order about 5th July, we arrived at North Sydney to relieve the C. G. S. Montcalm in reference to transferring mails at that place. We remained there until by your order we left Sydney on the 14th for Pictou, and proceeded on a cruise to different principal places in Prince Edward Island, then to Sydney, Baddeck and other ports in Nova Scotia, arriving at Halifax on the 24th. We then continued our cruise until we put the ship on marine railway on August 8, where ship was cleaned and painted, while work was being done in the engine department. We then coaled and work completed in the engine department, we proceeded on the 16th. While at Descousse, I was informed by Mr. Mooney, the chief engineer, that a breakdown had occurred in the furnace of the after boiler, also that the forward furnace was unre-

liable. I then informed you by wire, also by letter with the result that ship was ordered to Pictou and Georgetown, where four complete sets of fire grates were made and installed, after which we proceeded on our usual work. Attended the Canso regatta, where we spent a very pleasant day, everything going off nicely. September 4, we continued our fisheries protection work along southern shore of Nova Scotia mostly in connection with the protection of the lobster fisheries. I am pleased to report that this illegal fishing which in former years was carried to such an alarming extent is almost entirely stamped out for two reasons, one, the fishermen are becoming a law amongst themselves, while a few might be willing to carry on, they are afraid to do so, for fear that some of their former associates in these illegal transactions might be informing secretly, therefore illegal packing may be considered something of the past.

October 24, I received a departmental wireless message to proceed to North Sydney and meet Lieut.-Colonel Anderson, the chief engineer of the department; after arriving, coaled ship and sailed October 25 for Cape Race, Newfoundland, calling at St. Pierre, Cape Pine, Cape Race, Trepassey, and arrived back to North Sydney on the 29th, the Colonel then left for Ottawa. We then proceeded westward after waiting two days for orders, leaving the C.G.S. Petrel with a small fleet of United States seiners. We then worked west taking Lunenburg for headquarters cruising off this coast with two and sometimes three United States seiners until on the 15th after making a run to ascertain that the fleet had gone, I moored this ship in her old berth

at pier 1, H.M. dockyard, where usual repairs are being done.

I beg to say that the United States fleet did fairly well mostly taking good fares, and as a whole, the fishermen on this coast have done well, particularly Bankers, better fares than last year with nearly as good prices.

I have the honour to be, sir,

Your obedient servant, C. T. KNOWLTON,

Commanding Cruiser 'Canada.'

CANADIAN CRUISER 'PETREL,'
LIVERPOOL, N.S., December 7, 1907.

To Commander O. G. V. SPAIN,

Commanding Marine Service of Canada,

Ottawa.

SIR,—I have the honour to submit to you my annual report of service performed by the Canadian cruiser *Petrel*, also *Patrol Boat No. 1*, under my command, during

the season just closed.

The *Petrel* was commissioned at Liverpool on May 6, and took up station from Cape Sable to Cape Sambro, with your instructions to follow the United States seining fleet on their arrival in our waters. We boarded the first American seiner on May 20, at Shelburne. From that date on they kept increasing in numbers, and by June 13 there were forty-two vessels on the coast.

The first hauls of mackerel were made off Sambro on June 13. Some of the vessels report taking as high as three hundred barrels that day. From the above date

to the 16th more or less fish were taken off Sambro and Shutin island.

The fleet then moved east, following the school which showed up very well off Liscomb and White Head. Some fine catches were made off these harbours. Several vessels secured full fares before reaching as far east as Liscomb. These vessels would ice part of their catch and run it up to Boston fresh.

The fleet seemed to lose track of the fish after passing Canso, as has been the case the last three or four years. Seiners used to follow the school of mackerel around

Scatarie and on as far as Cape North, but in late years you will see hardly one of the vessels east of Louisburg.

The American seining vessels did well on our coast this spring; some of them

report taking as high as six hundred barrels.

By June 30, the last of the seiners had left for home, and by your instructions we proceeded to Prince Edward Island and took up station off East Point, with head-quarters at Souris. During the summer the railroad wharf at Souris was being repaired, and the harbour dredged out, which caused us to change our headquarters to Georgetown.

The catch of mackerel on the Prince Edward Island station was very poor this

year. On August 24 the first seiner arrived.

From the above date until October 25, seven seiners were cruising in these waters

with poor success.

By your instructions, we proceeded to North Sydney in the latter part of October and took up station off that port, meeting the American seiners that come down from Prince Edward Island, also one direct from home. These vessels remained cruising in Cape Breton waters until November 11, when they sailed home. They caught very few mackerel off Sydney, although they claim fish were seen by them, but the weather conditions were such that they had to abandon the voyage and return west.

During the season we made runs west to Shelburne, also east through the lakes

to Sydney, in fact we were kept busy all the season.

Illegal lobster fishing gave us some trouble during the month of October, but with the assistance of *Patrol Boat No. 1*, we were able to locate the gear and confiscate it.

Patrol Boat No. 1 was, by your order, despatched to Dalhousie early in June, to assist Inspector Chapman in the protection of the salmon fishing. Whilst doing duty there, the boat was fired on from shore by some person with a rifle, the shots hitting the boat several times, two of the bullets going through the wheel-house, clearing the captain's head only by a few inches. The boat went back to Prince Edward Island, arriving there on August 15, when she took up patrolling the coast, carrying out the lobster law re close season. This little boat has done excellent service during the year.

The hake fishing off Souris was a great success this year. Large quantities were brought in fresh by the government fish drier, also by the Atlantic Fish Company. As many as fifty and sixty small vessels can be seen engaged in this fishery during the months of July, August and September and late in October, from two to five miles off. The cod fishing on the outer ground in the gulf was not a success this year

on account of the rough weather.

By your instructions, we left Sydney on November 11, and proceeded west, calling at different places, arriving at Liverpool on the 16th, placing ship in winter quarters on 21st and paying off on 22nd.

I have the honour to be, sir, Your obedient servant,

W. H. KENT,

Captain.

DOMINION CRUISER 'OSPREY,'

SHELBURNE, November 23, 1907.

To Commander O. G. V. SPAIN,

Commanding Fisheries Protection Service of Canada, Ottawa.

Sir,—I again have the honour to submit to you an annual report on the work done by the cruiser Osprey, under my command, during the season just closed.

I left home on March 13, and arrived at Shelburne on the 18th, and superintended the necessary repairs, cleaning, painting, &c., until May 4, when I engaged what crew were available and commissioned ship May 9, having finished taking on board stores, bending sails, &c., unmoored ship and anchored in the stream.

Owing to the unsettled state of the weather at the time, we were detained in the vicinity of Shelburne until the morning of the 13th, when we proceeded to sea, and arrived at Halifax the same evening. We took on board ammunition and some other stores which were not available at Shelburne, and had the crew measured for uniforms.

15th.—Proceeded to sea again, and arrived on our station at Canso on the 16th, when we took up our customary duties, inspecting lobster factories, fish traps and

attending to the various other duties in connection with the fisheries.

June 13, the first of the United States seiners made their appearance on this station; our attention was then transferred to them. Continued in company with the seiners, remaining between White Head and St. Esprit until June 25, when we saw the last of the fleet make sail for home.

July 5, acting under your instructions, we proceeded to Port Hawkesbury.

July 8, hauled on marine slip and had ship cleaned and painted; 12th, finished work on ship and anchored in the stream; 13th, proceeded back on our station and took up our usual duties.

August 1.-We went to Lunenburg, and communicated with Fishery Overseer

Webber, at Chester.

August 6.-Mr. Webber joined the ship and we proceeded to St. Margaret's bay and inspected all the fish traps in that vicinity.

August 9.—Seized a fish trap at Hubbard's cove, set without a license. We took the trap on board the Osprey and landed it at Chester, in care of Overseer Webber.

13th.-Met a number of the fishermen in St. Margaret's bay and made arrangements with them in reference to trap licenses, &c. Several of them made application at once and others promised to take out licenses, and I found most of the fishermen quite willing to abide by the fishery regulations.

August 15 .- Having got through with our work in that vicinity, we landed Overseer Webber at Chester, and proceeded back to our station at Canso, where we arrived

the 17th, and resumed our usual duties for the remainder of the season.

November 8.—Received instructions from you to be in Shelburne the 15th to pay off crew and put ship in winter quarters, I proceeded west in company with the last of the United States seining fleet, and arrived at Shelburne the night of the 16th, calling at Halifax on our way.

19th.—Moored in winter quarters, stripped ship and landed all stores and gear in

the warehouse.

23rd.—Paid off crew and put ship out of commission, and gave it in charge of

Captain Hipsom for safekeeping.

In regard to the catch of fish for the season on this station, the catch of codfish by the shore boats will be below the average, owing principally to unsettled weather, but most of the Bankers made good fares.

Lobsters were about an average catch, except on the south shore of Cape Breton and St. Peter's bay, where they were practically a failure, owing to the late season

and the loss of traps by the drift ice, which swept the whole shore.

Mackerel were searce on the shore in spring, and consequently the shore boats realized small fares, but in the latter part of October some of the boats made good catches, but the weather was stormy at the time that the mackerel were passing and fishermen could not attend to their nets with advantage.

Herring will be about an average catch.

In conclusion, I am pleased to be able to say that the close season for lobsters has been well observed on this station, and the majority of the fishermen render us all the assistance they can to help to keep down the illegal business.

I have the honour to be, sir,

Your obedient servant,

JOHN GRAHAM, C.G.S. 'Osprey.' C.G.S. 'VIGILANT,'

WALKERVILLE, ONT., December 17, 1907.

To Commander O. G. V. SPAIN,

Commanding Marine Service of Canada, Ottawa.

DEAR SIR,—I beg to forward herewith my annual report of the work performed by the Vigilant during the past season.

On account of the difficulty with my former first officer, the ship was not placed in commission until May 3. On that day a departure was made down the river with Mr. Nicholson on board, for the purpose of testing and regulating the new log. On the 4th, further testing was made with the log, and Mr. Nicholson left the ship.

May 18.—At Windsor, Captain Spain and a party of Americans came on board and were conveyed to Amherstburg to make arrangements with regard to *Patrol Boat* at Lime Kiln Crossing.

24th.—Dressed ship and at noon fired royal salute, 21 guns.

June 3.—By instructions, swept over the wreck of the tug Castles to ascertain if contractors had completed their contract, subject of special report.

June 25, arrived at Toronto to take on board the Waterways Commission.

27th, 12.20 a.m., arrived at Port Colborne, where the commissioners inspected the harbour works, and they left the next day.

July 1.—By instructions, lying in Port Dover for the purpose of aiding citizens to celebrate Dominion Day; at noon fired a salute of 15 guns. Ship was dressed for the occasion.

13th.—About thirty-five miles east of Pelee island, we seized 21 gill-nets containing a few fish.

16th.—A few miles east of former seizure, took up 37 nets.

27th.—Engaged sweeping over wreck of Armenia, at that time finding as little as 23 feet over the same.

August 1, at 3.45 p.m.—Departed down the river from Windsor with Captain Spain on board, to make further arrangements with regard to *Patrol Boat* at Lime Kiln Crossing.

5th.—By directions, we took sextant angles of Grubbe Reef gas buoy and found that it had been moved a little over three-quarters of a mile, and we telephoned these facts to the party in charge at Amherstburg.

6th.—By instructions, I proceeded to Collingwood in regard to the McMaster desertion.

14th.—South of Cut light, Long Point, and about two miles north of boundary, I seized twelve nets.

22nd.—Arrived in Toronto at Polson's dock, to have maxim guns mounted, and lay there till work was completed on August 30.

September 7.—South of Long Point, seized a quantity of nets, and the same evening sold them to R. Moore for \$40.

26.—Being instructed to inquire into reported wreck of steamer Rust, which had been aground on Pelee point, found that she had been released and taken to Toledo dry dock.

October 11, 10.55 a.m.—Left Amherstburg for Pelee island with Judge McHugh and party, to hold court of revision, and returned the same evening.

14th.—We went again to the wreck of the *Armenia* to sweep more carefully over it, as the United States hydrographic engineer had reported as little as fifteen feet over the wreck; found that this sounding was a buoy attached to the wreck, and that not less than twenty-four feet was found, and this was reported.

29th.—Off Long Point, nearly two miles north of boundary, seized twenty-two nets, containing 550 pounds of fish. Sold fish and nets to W. G. Ainsley, Port Dover.

November 18.—By instructions, we went to the wreck of schooner *Houghton* and took angles to ascertain whether it lies on the Canadian side of the boundary line. Matter reported.

19th.—Seized an American gasolene launch, and two punts, afterwards took up a few nets, sent the men ashore on North Bass island, sold the nets to Mr. McCormick, of Pelee Island, for \$8.

24th.—Stored the gasolene launch at Port Stanley, and gave one punt to Mr. Stanton, in place of his, destroyed in collision with the tug Nettie B.

December 7.—Proceeded up river to Walkerville to lay up ship.

#### REMARKS.

You will observe that considerably less seizures have been made this season, for the reason that the report made by Captain Schater, of the United States revenue cutter Morrell completely silenced the American fish companies, for the reason that the oft repeated complaint that I had seized their nets in American waters, was shown to be incorrect, and also the quick-firing guns that have been placed on the Vigilant have had a very good effect, as the poachers will not take the chances now as they formerly did, when we were only armed with rifles, and there will be less danger of loss of human life.

Fishing on the Canadian side of Lake Erie, upon the whole, has been better than for years past, and our fishermen are free to admit that this is largely due to the work of the *Vigilant*. The fishermen do not give me the aid that I think they ought. I have repeatedly requested them to do so, but instead of giving any information to me direct, they will write to the department, and by the time the information reaches me it is too late to be of any use, and I have also found on several occasions, that the report sent in to the department was not true, but was evidently done to obtain the services of the *Vigilant* unduly in their vicinity. Remarkable catches of fish were made towards the latter part of the season off Port Stanley, as much as forty-five tons being brought in in one day by seven small tugs.

I have the honour to be, sir,

Your obedient servant,

E. DUNN, Commanding C.G.S. 'Vigilant.'

Dominion Cruiser 'Kestrel,' Vancouver, B.C., November 12, 1907.

Commander O. G. V. Spain,
Commanding Marine Service,
Ottawa.

SIR,—I have the honour to submit to you my report of the work done by the Canadian cruiser *Kestrel*, under my command, patrolling the waters of the coast of British Columbia, for the year 1907.

When joining this ship again on December 25th, I immediately made ready for sea, leaving Vancouver on the 27th, visiting Nanaimo and other coast points as far south as Victoria, where fishing was being carried on, leaving Victoria on the 30th, we arrived in Vancouver the same evening, when the engineer was instructed to blow down and wash out the main boiler and make necessary repairs. Acting under instructions, I again left Vancouver on January 8, 1907, for Victoria. At this time I received several complaints from our fishermen, stating that the United States fishermen were fishing and cleaning their fish within the limit; and that there had not been any cruiser watching them since October. I at once wired the department

and received insructions to proceed with my patrol duties. This I did, delivering the stores I had on board for the lighthouses while en route to the fishing grounds, arriving at Stephen island, Hecate straits, on January 19. On the 21st, we arrived at Port Simpson for our mail. Here I learned that the people at Green island lighthouse were in bad straits for want of food and oil, and if they did not receive help at once would be starving. I took on supplies from the Hudson's Bay stores immediately and started for their relief. We succeeded on the 24th, during a very heavy gale, with high sea running, in landing a few articles, which kept them from starving until the gale abated, when ample stores were sent them. Great credit is due to the life-boat's crew in making the landing successfully, as they found both of the lightkeepers disabled and could not receive any assistance whatever from them. arrived at Simpson the same evening. Next morning we started on our regular patrol, cruising Hecate straits and boarding several fishermen. We continued cruising until February 1, on which date we arrived at Vancouver. After washing out boiler and attending to ship's business, we left again on the 12th, calling at Union for coal. Leaving here, we were cruising until the 21st, when we called at Port Simpson for our mail; we then continued cruising Hecate straits and visiting many uncharted harbours in Queen Charlotte islands. On March 1, we located an uncharted rock in Skincuttle inlet; stopped and took bearings of same. This rock was reported to you, and notices to mariners issued. We continued cruising until the 7th, on which date we reached Vancouver. After painting ship and making necessary repairs, we left again on the 19th and continued cruising. On the 25th we anchored in an uncharted bay in Goose island; a sketch of this bay with soundings was afterwards forwarded to you. Continuing, we cruised Hecate straits, visiting several outlying harbours. On the 28th we visited Rock Fish bay. At 0.17 p.m. of this date we sighted a steamer fishing well inshore at the mouth of Cumshewa inlet. I immediately gave chase, but as they saw us at the same time as we sighted them, she at once ran in and picked up her dories and escaped before we could reach her; thus another valuable prize of \$75,000 was lost for the want of a fast cruiser. This steamer proved to be the Manhattan, owned by the New England Fish Company.

During the next two days the weather was very bad and we lay at anchor in Selwyn harbour. While cruising Selwyn inlet, we discovered an uncharted harbour half a mile long by two cables wide, sheltered from all winds and affording splendid anchorage; a sketch of this harbour was made and forwarded to you. On the 30th the Manhattan was again sighted within the three-mile limit, but was not fishing. After watching her for some time, she proceeded five miles off shore and commenced to fish. We continued cruising in these waters until April 5, when we proceeded to Port Simpson for our mail. Leaving here we continued cruising, calling at Port Essington on the 8th for fresh meat, and arriving at Vancouver on the 17th. During this time several fishermen were driven from our harbours and the three-mile limit. On arrival at Vancouver, I received instructions to go on the marine slip for our yearly overhaul. We were on the slip until the 25th, repairing metal, &c. On the 27th we again started on regular patrol, arriving at Harriett bay, Queen Charlotte island, on May 1. Here I swung ship to test compasses; I also learned that the customs officer at Massett was granted permits to United States coasters, allowing them to do a coasting business, evading customs duties and committing other grave irregularities. I immediately started to investigate. Proceeding to Luxana bay, I seized a United States trapper with his traps, provisions, boat and outfit; these I took to Port Simpson and handed over to the collector of customs at that port, where he was made to pay duty and comply with our laws. Through the vigilance of the Kestrel around the shores of these islands, smuggling has ceased; there are no more permits granted, and the lucrative business at one time carried on by foreigners is now done by boats from Vancouver and Victoria, manned by our own people. Leaving Port Simpson, we cruised up Work's canal and filled fresh water tanks, returning

the following day. Again leaving on the 9th, we took up our regular patrol work in Hecate straits, calling at Essington on the 11th for fresh provisions. We continued cruising, and on the 15th spoke H.M.S. Egeria surveying off the north end of Queen Charlotte island. We then visited Virago sound and Naden harbour, returning on the 18th to Port Simpson for mail. Leaving here we called at Port Essington on the 23rd. On the 24th, we dressed ship and gave the crew liberty, it being a general holiday. On the 25th we again took up our patrol, arriving in Vancouver on the 27th. Leaving again on the 30th, we took Mr. Cunningham along with us on fish hatchery business. After coaling, we arrived at Alberni on the 31st. After cruising and visiting many places on the west coast, we returned to Vancouver on June 5. here, we proceeded on regular patrol, arriving at Port Simpson on the 13th. Here we met Mr. Busby, inspector of customs. On the 14th we proceeded to Massett, where he inspected the office there and found irregularities, as reported. Leaving there, we cruised south to Harriett bay, and other stations, arriving at Vancouver on June 18. On the 20th we left for the west coast of Vancouver island, calling at Barkly, Clavoquot and other sounds. While here we received instructions to make a survey of the channel south of Round island, also of Race passage; this we did. Returning, we arrived at Vancouver on June 26. On the 27th we blew down boiler and made repairs to same. Leaving on July 10, we cruised north, calling at Port Simpson on the 20th for mail. On the 22nd we called at Port Essington for fresh meat. On the 23rd we arrived at Petrel channel and anchored in an uncharted harbour at the west end. and also discovered that the channel, as reported on the chart, did not exist. I then made an examination and sounded the main channel very carefully, locating a very secure harbour ten miles from the west entrance. I made a sketch of these harbours and channel and forwarded it to you. Leaving here, we continued our patrol. At Butler cove we met the New England, and she was at once ordered to leave the harbour, which she did. From here we cruised to Queen Charlotte islands, visiting the different bays and inlets. On the 30th, I was requested to make a survey of an uncharted harbour where extensive copper mines are in operation, and now known as Skeda bay. I made a very careful sketch of this bay, and forwarded the plan along with photographs to Leaving here, we cruised south, arriving at Vancouver on August 6. After attending to ship's business, we sailed again on the 10th with Professor Prince and the Rev. George Taylor. From this date to the 24th, we were cruising and dredging at the various harbours in the inside channels, and on the west coast of Vancouver island. Returning, we washed out boiler and made necessary repairs. Leaving again on September 4, we were accompanied by Mr. Halkett, who made a very careful investigation of the many harbours visited for the purpose of locating suitable sites for lobster and oyster planting. After leaving Mr. Halkett at Nanaimo on the 11th, we again took up our regular patrol along the coast, calling at several stations, arriving at Port Simpson on the 24th, where we received word that smuggling was carried on in Portland canal, and we were requested to investigate. Taking Collector Sharp on board, we proceeded to Kinkoolett. On arrival, we found that the man had skipped out the day before, but we seized many of his goods, and they were left in care of the collector at Port Simpson. Returning, we cruised south, arriving at Vancouver on October 1. Leaving again on the 8th, we were on regular patrol duty during the month, visiting many of the harbours along the coast and in Hecate straits, calling at Port Simpson on the 20th for mail; cruising south, we arrived at Vancouver on the 30th.

After washing out boiler and making necessary repairs, we sailed again on November 8 for a month's cruise, calling at the different stations, as usual.

I am pleased to be able to report to you that during the year the Kestrel has done exceptionally good work on this coast, and has run without accidents of any kind. Through her vigilance, poaching during the past season on the west coast ceased. Not one vessel was sighted fishing within the three-mile limit, neither has there been a

complaint made that they have been doing so. As they were denied the use of our harbours, it practically put these smaller craft out of business. During the season of 1905 and 1906, 18,000,000 pounds of halibut were taken out of these waters. From 1906 to 1907, less than 9,000,000 pounds were taken. Why? Simply because they dare not run the risk; in consequence over half of these smaller craft have been sent to Alaska to operate there, and ship their catches down on the regular mail boats from Ketchikan and Peterborough to Seattle, the remainder of these boats confining themselves principally to the banks off Cape Flattey.

This fact alone goes very clearly to show that with proper protection, poaching

on this coast would cease.

While the above has been the condition on the west coast, the very reverse has happened along the northern coast in Queen Charlotte sound, Hecate straits and along the north coast of Queen Charlotte islands, where the larger boats operate. It is a well-known fact that during the months of February and March, 1907, over 1,500,000 pounds of halibut was absolutely stolen from our waters when the Kestrel was not there to watch them.

What we want is more boats, and we want them now, if we are going to preserve our halibut fisheries on this coast.

During the year the *Kestrel* has logged on an average speed of 9 knots, 16,972 miles, or an average of  $46\frac{1}{2}$  miles per day for every day in the year.

Allow me to also include the following report of the halibut fisheries of British

Columbia for the year 1907:—

I have the honour to submit the following carefully prepared statement of the number of pounds of halibut caught in the waters of the coast of British Columbia by Canadian and United States fishing vessels, from January 1, 1907, up to and including the month of October, with a comparative statement for the months of November and December, thus giving a statement of the total halibut catch in the above-stated waters for the year 1907.

	for the year Total catch	Value.
Canadian		\$ 236,500 1,542,820
Total	35,584,164 "	\$1,779,320

The fish above referred to were all practically caught in Canadian waters, or in other words, if there were cruisers enough to protect and keep foreign fishing vessels out of our harbour, and outside the three-mile limit, said foreign vessels could not possibly have caught in the same time, at the most, more than one-third of the above-stated catch, for vessels which now operate anywhere from 8 to 16 dories each and use our harbours to clean the fish which they catch, had they to keep out of our harbours and outside the three-mile limit, they could only operate four dories each, and it would be unprofitable to continue fishing.

You will note that the total catch for 1906 was 41,664,329 pounds, and the total for 1907 was only 35,584,164 pounds, a decrease of 6,080,165 pounds for 1907.

At the same time, you will also note that the Canadian catch has increased from 2,330,000 pounds in 1906, to 4,730,000 pounds in 1907, being an increase of 2,400,000 pounds, or more than double that of 1906. At the same time our Canadian market has increased for these valuable fish from a little over 450,000 pounds in 1906 to 1,664,000 pounds in 1907.

Referring to the 35,584,164 pounds of halibut caught during the year 1907 in the waters of the coast of British Columbia, I beg to state that the said amount is

accounted for, as follows:-

#### Canadian Catch-

Atkins Watson Company  Claxton Canning Company  British Columbia Packers	Lbs. 4,080,000 500,000 150,000
Total	4,730,000
United States Catch—	
	Lbs.
New England Fish Company	8,654,164
Tacoma Fish Company	4,560,000
San Juan Fish Company	5,640,000
Small craft	9,000,000
Other vessels	3,000,000
Total	30.854,164

The difference in the catch for 1907 may be accounted for as follows:—

Through the vigilance of the *Kestrel* and possibly other causes, the fleet of schooners and smaller craft operating on the west coast of Vancouver island, have practically been put out of business, and are now operating in Alaska. On the other hand, the larger boats have been increased by three, viz.: the *Grant*, *Edric* and *Francis Cutting*, and there are more to follow. At the same time there is no doubt that many of our banks are being depleted, and as I stated in last year's report, many of the banks where fish were plentiful, are now depleted and are not fished on; and I know that the Kestrel bank, which yielded many hundred tons of fine fish in the past, is now nearly exhausted. The *Grant* fished here a few months past and although she caught 200,000 pounds, the average weight of her catch was only 12 pounds per fish.

It is a fact that many of these banks are fast being ruined, and without further protection, our halibut fisheries will soon be something of the past. The large fishing firms recognize this, and instead of building the regular type of fishing vessels are now building vessels, that when not used for fishing, can be put to other purposes. We have at present the finest fishing banks in the world, and it seems a shame to let them become depleted when with proper protection they would last for many years to come; but at the present rate of the increase of fishing, one of the finest assets of the Dominion of Canada will have passed for ever. We need more boats and want them now.

I am. sir.

Your obedient servant,

HOLMES NEWCOMB.

## APPENDIX No. 15.

## NATURAL HISTORY REPORT.

To the Deputy Minister,

Department of Marine and Fisheries.

Sir,—I have the honour to submit my natural history report for the year 1907.

This deals in particular with the collection of natural history objects obtained in the field during the summer of that year, in the provinces of Saskatchewan and Alberta, and incidentally with the general character of the lakes of the prairies, as well as with certain observations bearing on fishery matters in general. Allusion is also made to observations carried on along the British Columbia coast, chiefly in connection with the introduction of the American lobster into the waters of the Pacific; to a fishery exhibit at the provincial exhibition held at New Westminster; and to the Fisheries Museum.

Before starting to collect, I first of all took a general survey of the field, and realizing the vastness of the area, determined that the most practical way of gaining some knowledge of what the waters of the two new provinces contained was to select certain districts, and as thoroughly as possible work those over for the season, leaving it to the discretion of the department, whether or not the work should be subsequently followed up. For the province of Saskatchewan, the chain of lakes known as Muskeg, Pasquia, Wyosung and Qu'Appelle lakes, in the valley of the Qu'Appelle, was therefore selected; and for the province of Alberta those known as Beaver Hills, Hastings and Cooking lakes. These latter are situated east of the city of Edmonton, and as those of the Qu'Appelle valley are much farther south and east, this seemed advisable as the fishes found to inhabit the waters of the one district could then be compared with those of the other; and when this was done it was found that in general the same kinds were indigenous to the two districts; an indirect evidence that such kinds had a wide distribution over both of the provinces.

My notes contain data regarding the fishes, with the localities where they were collected, but as there are a number of cyprinoids and percoids which require to be thoroughly worked over, the following list of identified species in the meantime is given. It may be mentioned that no new kind of fish appears on this list, that is, no kind unknown to science, but the value of the list regards additional light grained as

to the geographical distribution of the several kinds. Buffalo Fish (*Ictiobus bubalus*).

White Sucker (Catostomus commersonii). Red Horse (Moxostoma aureolum). Spawn Eater (Notropis hudsonius). White Fish (Coregonus clupeiformis).

Tullibee (Argyrosomus tullibee).

Common Pike (Lucius lucius). Brook Stickleback (Eucalia inconstans).

Nine-spined Stickleback (Pygosteus pungitius).

Sand Roller (Percopsis guttatus).

Pike Perch or Doré (Stizostedion vitreum).

Yellow Perch (Perca flavescens).

Johnny Darter (Boleosoma nigrum).

Burbot or Ling (Ling maculos.)

Besides fishes, numerous specimens belonging to other classes of the animal kingdom were collected or observed.

Of Detrachians and Reptiles specimens of Frogs (Rana), Toads, (Bufo), Salamanders, and Garter Snakes (Eutainia), were obtained. Both provinces appear to be poor in reptiles; no turtles were seen, but rattle-snakes (Crotalus) are known to inhabit certain localities in Alberta. Some Batrachians are plentiful.

The valley of the Qu'Appelle is a regular paradise of birds. Among others observed were: the American Herring Gull, Franklin's Gull, a Tern (perhaps the Black Tern), the Double-crested Cormorant, the White Pelican, innumerable ducks, including the Canvas-back and Red-head, the American Coot, the Willet, the Mourning Dove, the Vulture (known as the Turkey Buzzard), the Marsh Hawk, the King-bird, the Crow, the Cow-bird, the Yellow-headed Black-bird (very numerous among the tall reeds), the Red-winged Black-bird, the Western Meadow Lark, Brewer's Black-bird, the Bronzed Grackle, the Cat-bird, Parkman's Wren.

Wanton destruction under the pretext of sport is being waged against the birds, and I predict that unless rigid measures are enacted and enforced, very soon this wonderful phase of bird-life, still at its height, in the valley of the Qu'Appelle, will become a thing of the past.

Eggs, sometimes with the nests, of the following named birds were obtained: The Widgeon, the Red-head Duck, the American Coot, the Cow-bird, Brewer's Black-bird, the Bronzed Grackle, the Cat-bird, Parkman's Wren, and a Marsh Wren; besides eggs of others which were either brought to me, or of which the bird was not seen; and as the eggs of many closely related birds are almost indistinguishable in their markings or general contour, some such require to be worked over before their identity is certain.

Beaver Hills lake, in the province of Alberta, is another regular haunt of various birds, different kinds of which were sometimes to be seen congregated together. Among others observed were Curlews and other shore birds, great flocks of Gulls and of Terns, innumerable kinds of Ducks, and White Pelicans; and in the net set for fish, a young Grebe was caught, which afterwards escaped.

During the summer months Beaver Hills lake is simply alive with innumerable water birds, but owing to the inroads of civilization this remarkable phenomenon, still at its height, of the northwestern wilds, will undoubtedly shortly be changed. Towns are springing up, and the birds, just as soon as they become affected through the entrance of man, will disappear to betake themselves to more congenial haunts still further north. It was to be regretted that when the place was visited—late in July and early in August—the nesting season was then over, so that no eggs were to be found; and this the more so owing to the change, just pointed out, which in the near future will inevitably come over this phase of bird life.

Flickers (*Colaptes*) a species of woodpecker; and Night-hawks, on one occasion were seen in the interior; and a few Owls—one at a time—were also observed, and being nocturnal birds they were seen at dusk, and were generally perched on trees.

Near Hastings lake, early in August, a nest of the Blue-winged Teal, containing eight eggs, was found. This was of course unusually late in the season for the bird to be nesting, and the eggs were ready to be hatched.

The following observations regarding Mammals may be of interest: Rodents, especially the little gopher, are very plentiful all over the prairie, and a few specimens of different kinds of rodents were obtained. Having an opportunity to visit the park in Alberta, where the recently acquired herd of Buffalo have been introduced, I saw about thirty of the bulls herding by themselves, but the park was too extensive to devote the time to go over the whole of it. They were massive animals, but whether owing to their transportation, or because the new environment may not have suited

them, the most of them appeared to be in poor condition. I also saw the tracks of the escaped bull, of which so much appeared in the newspapers, along the shores of Beaver Hills lake. A Shrew was found lying dead in the village of Chipman, Alberta, and three Bats were obtained in the Qu'Appelle valley.

The smaller creatures which were found need not be treated of here in detail, but mention may be made of Crayfishes (Cambarus), as well as of parasites on fishes; and

also of various aquatic insects.

In regard to the character of the lakes observed in those parts of the two provinces which were visited, and as to whether or not such are suitable for the stocking with fish, there is the following to be said: The lakes observed were on the prairies, or where owing to the channels of rivers, the land was more or less undulated; but as the mountainous parts of Alberta were outside the field where the season's work was carried on, no information was gained concerning lakes in those regions. It should be stated that distances between stopping places in the new provinces are usually great, and the observations of lakes were therefore often made whilst moving about, but a general idea of the prairie lakes was easily gained. Many of them are temporary or seasonal lakes, of moderate depth, although some of them may cover a considerable area in the spring of the year, but in the summer such are either entirely, or almost entirely, dried up. Being situated on the plains, it will readily be conceived why there would be lakes of this character. They are known among the people as sloughs, and many of them at the proper season yield a goodly crop of marsh hay. Still from what appears in this report as to the collection of fishes made, it will be seen that in the northwestern provinces there are lakes of quite another character. Beaver Hills lake, for instance, although situated in the plains, is a permanent sheet of water of great extent, fed by streams, some of which I saw, and no doubt also by underground springs. The fish inhabiting this lake, and others of its character, are mainly pike and suckers, and whilst the latter in our own parts of the Dominion are generally considered inferior, in those parts, owing probably to the coldness of the northern waters, they are really a choice fish. There seems to be a mania always among the people to disturb a good sheet of water by introducing some kind of fish, in particular to introduce black-bass or trout, whether or not such waters are suitable for them; and in a public address which I was asked to deliver at Tofield, a question bearing on this matter was put to me in regard to Beaver Hills lake. In effect I could only reply: Why disturb the natural condition of things, when, as in this instance, it is good? Owing to the weeds and muddy nature of the bed of Beaver Hills lake, pike and suckers thrive in it, and do well together, and the people are supplied with excellent fish, whereas to introduce some other kind of a rapacious nature would only interfere with the present natural and satisfactory condition of things.

The physical features of the chain of lakes of the valley of the Qu'Appelle are of quite another character. The Qu'Appelle river, with its system of lakes, for ages past, has gradually lowered its bed, so that its undulated banks have now the appearance of having been, as it were, upheaved upon the prairies. But this is only in appearance, for the apparently upraised banks are purely the result of the scooping out, and the consequent lowering of the river's channel. Nowhere else, when contrasted with the level of the prairies, have I seen a similar feature, and having made a survey of the entire chain of the lakes, from its head to its terminus, I found that they manifested great variability both as regards their shores and the nature of their beds, and in the character of the organisms with dwell in them. For instance, buffalofish appeared to be most plentiful among the bulrushes at Muskeg lake, at the head of the chain, tullibee at Pasquia lake, which is further down, whilst pike-perch and suckers were more evenly distributed, the latter being very plentiful right to the

terminus of the chain.

Now the introduction of a fish such as the black-bass into those lakes would not be detrimental, to any grave extent, to the existent condition of things. The bass

would simply do what the several indigenous kinds of fishes have done; they would seek out amid the varied features of the lakes that environment best adapted to themselves; nor would there be great competition with other useful kinds, for pike would still lurk among the weeds; pike-perch could hold their own equally against them, which means that the adults at least, of each kind would more or less leave the other alone; whilst crayfish and other crustaceans, small cyprinoids, of which there are great shoals, and the young of such a fish as the buffalo fish, a kind whose numbers could admit of considerable reduction, would supply them with abundance of food. In fact, I have never before seen a system of lakes just corresponding to those, where blackbass could be introduced with impunity, or where the welfare of the present desirable denizens of the water would in no serious way be affected.

But whilst the lakes of the valley of the Qu'Appelle are in themselves all that could be desired, and their magnificence is lauded in the foregoing, attention is here drawn to a matter of quite a serious character. In making my collections, many hundreds of fishes were caught, out of which the best were selected as specimens. As I examined them one by one, I found that there was a disease among the fish, especially among the pike-perch; nor was the cause of this far to seek, for I discovered that the lakes, chiefly at their head waters, had somehow become tainted with impurities; and hundreds of large pike-perch were seen lying dead among the reeds. On returning to Regina, I interviewed Dr. Charlton, Provincial Bacteriologist, in regard to the matter, and procured him two of the diseased fish, and he intimated his intention of going right to the place, where he can get the blood from the living fish, so as to enable him to fully investigate as to the nature of the disease.

According to instructions, three collections of fishes were made, one for Saskatchewan, another for Alberta, and a duplicate of each for the Dominion. The Saskatchewan collection is now on exhibition in the provincial government block in Regina; but on account of the present crowded condition of the provincial government offices, that for Alberta was securely soldered up in a copper Agassiz tank, pending the time when there will be an available place for putting the collection on public exhibit.

During the autumn of 1907, my time was occupied in making observations in regard to the advisability of transporting American lobsters from the Atlantic coast to the Pacific coast, and also in regard to what success had attended the introduction of the Atlantic coast oyster into the waters of the Pacific; and for this purpose the department's SS. Kestrel was placed at my disposal.

I was also entrusted with the setting up and supervision of a fishery exhibit at the New Westminster provincial exhibition. For this purpose a choice of a site was put at my disposal by Mr. Keary, manager and secretary of the exhibition, and I therefore selected a space at the north end of the industrial building, the dimensions of which were about 58 feet long, 20 feet wide and 16 feet high.

About one-half of the space was allotted to aquaria and egg troughs, and a table, stands and shelves, were placed in the other half, for an exhibition of mounted fishes and other specimens. The walls were adorned with mounted water birds, kindly loaned by the Carnegie library of New Westminster; with mounted fishes from the Fisheries Museum, Ottawa; and with cases containing fish eggs and newly hatched out fry in formalin, to show the process of development. A mounted female moose, also loaned by the library, was placed on a stand near the centre of the exhibit, and an unclaimed skin-canoe of the previous year's exhibition, put at my disposal, was suspended from the ceiling.

The aquaria and fish troughs were of course constantly supplied with running water, with pipes adjusted for the inlet and outlet of the water, and in the former were placed living samples of artificially reared cohoe, sockeye, and steel-head salmon and rainbow trout; whilst in the trays or wire-baskets in the troughs were eggs of the cohoe and spring salmon. There was also a small living sturgeon in one of the aquaria, and in a pond, fed by a fountain nearby the industrial building, were placed some good-sized rainbow trout.

In the report of 1906, a lengthy account of the Fisheries Museum, with descriptive remarks on the vertebrate portion was given, and as the specimens added to the collection in 1907 are virtually embraced in the body of this report, there is little to add in regard to that institution. During the calendar year the museum was visited by over 13,000 persons by actual signature, besides schools and teaching staffs, and these include not only residents of the Capital, but visitors from all parts of the Dominion, and from foreign countries, and the museum continued to hold rank as an attractive public institution.

Respectfully submitted,

ANDREW HALKETT,

Naturalist, Department of Marine and Fisheries.

## APPENDIX No. 16.

## THE OUTSIDE STAFF OF THE FISHERIES BRANCH.

The following are Inspectors of Fisheries in the different provinces of the Dominion, 1907-8.

Name.	P. O. Address.	Extent of Jurisdiction.				
	North Sydney, N.S. Pictou, N.S.	District No. 1.—Cape Breton Island. District No. 2.—Cumberland, Colchester, Pictou, Antigo-				
Robertson, Andrew C	Barrington Passage.	nish, Guysboro', Halifax and Hants counties. District No. 3.—Lunenburg, Queens, Shelburne, Yar- mouth, Digby, Annapolis and Kings counties.				
Calder, John Chapman, Robt. A	Campobello, N.B Moncton, N.B	District No. 1.—The counties of Charlotte and St. John. District No. 2.—Restigouche, Gloucester, Northumber-				
Harrison, H. E	Fredericton, N.B	land, Kent, Westmorland and Albert counties. District No. 3.—Kings, Queens, Sunbury, York, Carleton and Victoria counties.				
Matheson, J. A	Gaspé Basin, Que Ottawa	Prince Edward Island. Lower St. Lawrence River and Gulf. Dominion of Canada.				
Riendeau, Jos Hurley, J. M	Montreal	The counties of the province of Quebec bordering on the St. Lawrence from Huntington to Three Rivers. That portion of Ontario east of the western boundary line				
fruitey, o. m	Denovino, Onc	of the counties of Durham, Victoria and Haliburton, including Lake Scugog and the eastern boundary of Muskoka and Parry Sound districts.				
Sheppard, O. B	Toronto, Ont	That part of the province of Ontario west of the eastern boundaries of the county of Ontario, and the districts of Muskoka and Parry Sound along the Mattawa and Ottawa rivers, and northward along the north-eastern boundary line of said province to James bay.				
Duncan, A. G	Marksville, Ont	That portion of Ontario lying west and north of Lake Nipissing, the rivers Mattawa and Ottawa and the north-east boundary line of the province to James bay, embracing Nipissing, Algoma, Thunder bay and Rainy river districts, Lake Superior and such portions of Lake Huron and Georgian bay as lie adjacent or opposite to				
Young, Wm. S Miller, E. W	Qu'Appelle					
McKay, Horace T Sword, C. B	New Westminster	Yukon district. Province of British Columbia—No. 1. Southern district.				
Williams, J. T		37 0 37 T1				

#### OTHER DEPARTMENTAL OFFICERS.

MacFarlane, Peter	New Glasgow, N.S	Naturalist and Curator of Fisheries Museum, at Ottawa. Officer in charge Bait cold storage. Inspector of fishways. In charge Intelligence Bureau.
Mackerrow, A. D	Liamax	In chargo intonigoneo Daniero

## LIST OF FISHERY OVERSEERS IN THE DOMINION OF CANADA

1907-08.

#### NOVA SCOTIA.

 $Annapolis\ County.$ 

		The second secon
Name of Overseer.	P. O. Address	Extent of Jurisdiction.
Fritz, Henry	Port George	Annapolis county.
	Ant	tigonish County.
McAdam, Alexander	Malignant cove.	Antigonish county.
	Cape	e Breton County.
Forbes, A. R Lavatte, Henry McCuish, John McDonald, Joseph McInnis, Michael R McLean, John McLean, Murdock McLead, Angus. Sullivan, Timothy.	Louisbourg Scatarie Little Lorraine Amaguadus pond Gabarouse lake Leitches creek Port Morien	
	Col	Chester County,
Davidson, J. W	Tatamagouche	11
To difference con manifestation and the state of the stat	Cun	iberland County.
Angevine, Frank Brownell, Ferguson Canning, S. Reid, John D. Thompson, Guy	Middleboro Northport Advocate Hr. Pugwash Oxford	Camberland county.
		Digby County.
Bishop, H. RGerman, Thomas	Digby Meteghan	Municipality of Digby, Digby county. Municipality of Claire, Digby county.
	G	uysboro County.
Davis John	Guysboro Port Hilford	Guysboro county.
	Н	Talifax County.
Gaston, Robt Kennedy, Wm Rowlings, George	Pope's harbour Hubbard's cove Musquodoboit hrbr	Sea coast and inland waters of Halifax county. Halifax county, Sea coast and inland waters of Halifax county.

## List of Fishery Overseers in the Dominion of Canada, &c.—Continued.

#### NOVA SCOTIA—Continued.

#### Hants County.

Name of Overseer,	P. O. Address.	Extent of Jurisdiction.
McDonald, Chas	. Shubenacadie	County of Hants.
	Int	verness County.
Aucoin Wm	Eastern harbour	No. 6.—From Big Pond Lobster Factory north, including Cheticamp, Eastern harbour, Little river, Pleasant
Chisholm, Arch. A	. S. W. Margaree ,	bay and Paulet cove.  Inverness coast from Broad cove Chapel to Delany's cove, also East Lake Ainslie and streams, Loch Ban, S. W.  Margaree river and tributaries and Margaree river
Hart, Albert	. N. E. Margaree	from forks of Margaree Hr. Coast of Inverness Co., from Delany's cove northward including Big Pond, Eastern Hr., &c., also N. E. Mar- garee Riv. from Margaree forks to Source, and all other streams to Victoria Co. line.
McDonald, Ronald McIntosh, Geo. P	Broad cove Chapel Pleasant Bay	Inverness County, Bounty purposes. Coast of Inverness Co. extending from Pleasant bay to Meat cove (inclusive).
McLennan, Jno. B McLean, D. F	. Kingsville	No. 2.—Inverness Co. No. 1.—W. Division coast south of Mabou Hr., including S. W. Mabou river, Port Hood, Judique Long Pt., Pt. Hastings and Hawkesbury, to N. W. arm River Inhabitants in interior, and north side Victoria Co., from Js. McKinnons to Whycocomagh bay: and through Glencoe and S. W. ridge of Mabou, to Mabou bridge.
<ul> <li>Intelligence description of the American</li> </ul>	1	Kings County.
Bishop, Adolphus Eaton, E. B Reid, Reuben F	Grand Pré	Kings county.
	Lu	nenburg County.
Morris, Jno. B Webber, John A	Bridgewater	Lunenburg County.
		Pictou County.
Kitchin, James	River John	Western Division Pictou Co., comprising coast, water from Colchester Co., line to Cole's reef, Pictou Hr. and streams flowing into viz., River John and tributa- ries, Toney river, and Fig and Little Cariboo rivers.
McDonald, Alexdr. J Pritchard, A. O	Bailey's Brook New Glasgow	ries, Toney river, and Fig and Little Carnoo rivers.  Pictou County.  Pictou harbour, Pictou Island, East, West and Middle rivers, Pictou Co.

## List of Fishery Overseers in the Dominion of Canada, &c.—Continued.

#### ${\bf NOVA~SCOTIA-} Concluded.$

#### Queens County.

Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
Bain, J. L Young, Chs	Liverpool	Queens county.
	Ric	hmond County.
Brymer, Arthur Boyle, Dugald R Morrisson, Archd	West Arichat	No. 3.—Eastern division that portion of sea coast, lakes and inland waters lying east of St. Peter canal.  Coast and inland waters of Isle Madame including south erly half of waters of Lennox passage.  Richmond county.
	She	lburne County.
Goudey, E. S Hines, George K		From and including Clydes river to Yarmouth Co. line. Shelburne county.
	$V_i$	ctoria County.
Morrison, Alexdr	Halifax Baddeck. Cape North Neils harbour Wreck cove	St. Paul's island. Victoria county. Cape North, Bay St. Lawrence to county line at Meat cove Neils harbour including Green cave and New Heaven. Englishtown north to Smoky cape at south Ingonish. District Big Bras d'Or north to Englishtown. North and south Ingonish, including Ingonish island. Victoria county.
	Yan	rmouth County.
Hatfield, A. M	Arcadia	Yarmouth county.
		BRUNSWICK.  Ubert County.
Dowling, C. S	Alma	County of Albert.
	Ch	arlotte County.
Billings, Robert  Fraser, W. A  Savage, Charles  Todd, Frank	Woodward's cove, Grand Manan Campobello	Waters in vinicity of St. Andrews, extending from Owen head to Oak bay.  Island of Grand Manan, and waters surrounding the same. District of Campobello, and the west Isles, Charlotte Co. County of Charlotte.

List of Fishery Overseers in the Dominion of Canada, &c.—Continued.

### NEW BRUNSWICK—Continued.

#### Gloucester County.

Name.	Address.	Extent of Jurisdiction.	
Canty, Thomas Doucet, Jérôme E Robichaud, Wm. C	Bathurst Elm Tree	Gloucester county.	
	1	Kent County.	
Hannah, Wm. F LeBlanc, O. J. O	Richibucto Buctouche	County of Kent.  Coast line and inland waters at the parishes of Wellington and St. Marie.	
	North	umberland County.	
		Both shores of Miramichi river from Point Au Quart on south to Oak point on north to junction with N. W. S. W. Miramichi rivers, with all islands therein and streams emptying into.  County of Northumberland.	
	(	ucens County.	
Belyea, J. P Hetherington, I. T	Gagetown	County of Queens.	
<b>b</b>	Res	tigouche County.	
McLean, Donald Miller, George		nousie.	
	Su	nbury County.	
McLean, Cecil F,	Burton	St. John river from Indiantown, Sunbury county, to the county line of York.	
	St	John County.	
Belyea, J. F Cochrane, Jno		County of St. John. City of St. John and vicinity.	
	V	Tictoria County.	
LeClair, Joseph	Grand Falls	County of Victoria. Madawaska district.	

## Last of Fishery Overseers in the Dominion of Canada, &c.—Continued.

### NEW BRUNSWICK-Concluded.

#### Westmorland County.

Name.	Address.	Extent of Jurisdiction.
Arsenault, Thos. V	Barachois	Coastal and inland waters of parish of Shediac and portion of Botsford parish, North of Big Shemogui Hr., and road from same to near Bristol corner, past Bristo corners and Lowthers to parish at Sackville with Juris diction in parishes of Moncton and Salisbury.
Melanson, Ambroise Copp, George E Prescott, Joseph	Baie-Verte	Parish of Dorchester including Petitcodiac river. Part of Botsford parish, county of Westmorland. Parishes of Westmorland and Sackville.
		York County.
McKay, James D	Fredericton	County of York.
	PRINCE	EDWARD ISLAND.
_	I.	Yings County.
McCormac, J. A	Souris	County of Kings.
	I	Prince County.
Davison, John	Bedeque	County of Prince.
	Q	Queens County.
Hobkirk, W. C	Charlottetown	Province of Prince Edward Island.
	PROVI	NCE OF QUEBEC.
	G	aspé County.
Veit, Fred	Gaspé Basin	That portion of the province south of the St. Lawrence to and including county of Bellechasse, but specially the counties of Bonaventure and Gaspé.
	Me	ugdalen Island.
Arsenault, AzadeChevrier, J. A	Amherst, Magdalen	Magdalen islands.  That part of Magdalen islands comprising Entry, Amherst and Grindstone islands, also Harbour Basque lagoons.  That part of the islands including House harbour Grosse isle, Grand entry and bays and Bryon island

### List of Fishery Overseers in the Dominion of Canada, &c.—Continued.

#### PROVINCE OF QUEBEC-Concluded.

Saguenay County-North Shore.

Name of Overseer.	P. O. Address.	Extent of Juridiction.
Cabot, Geo. E		The Island of Anticostf and adjacent waters.
Blais, Alex	thier en bas. Summer address) Long Pt. Bradore, via	
Comeau, Nap. A	Newfoundland. Godbout	North shore, including Jambons to Tadoussac (Godbout District).
Cormier, Achille	(Winter address) Esquimaux point. (Summer) Romaine via Natashquan.	North shore, from Cape Whittle to Natashquan point (Romaine district).
Joneas, Richard	Natashquan	North shore, including Natashquan to Ste. Geneviève
LeBlanc, Eusèbe	Esquimaux point	(Natashquan District). North shore, including Ste. Geneviève to Pigou (Mingan district).
Le Couvie, John	(Winter address) Lob- ster cove, Gaspé. (Summer address Cr. Commander of	North shore, from Chicatica to Cape Whittle (St. Augustin District).
Mignault, Theotime	Princess. (Winter address) 140 Rue St. François Quebec. (Summer Moisie.	
The following s tion re fishery matter		ely Bounty Officers, exercising no other juridic-
Forest, George	Bonaventure river	Bonaventure county, from Maguasha to and including
Chapados, F. X	Little Pabos	Paspebiac. Bonaventure Co., from Paspebiac to Gaspé Co. Gaspé county, from county line eastward to but not including Barachois, Malbaie.
Carter, A. T		Gaspé county, from Barachois, Malbaie, to Fame point,
Letourneau, Louis	Mont Louis	Gaspé county, from Fame point to and including Claude
Verreault, Louis	Petits Mechins	river. Rimouski county.
	SAS	SKATCHEWAN.
McKay, Henry	. Cedar lake	Waters between district of Prince Albert on West and Grand rapids on Great Saskatchewan river, Sask.
Robt. Headrick Silverthorn, J. W	Prince Albert Lumsden	District of Prince Albert, Saskatchewan.  District of Long lake, Qu'Appelle river, bounded on south by base line tp. No. 16, on north by tp. No. 30, on east by east side to range 19, and on west by west side of
		range 27, all west of 2nd Meridian.

# LIST of Fishery Overseers in the Pominion of Canada, &c.—Continued. BRITISH COLUMBIA.

Name of Overseer.	P. O. Address.	Fxtent of Jurisdiction.	
		1	
Galbraith, W. M  Harrison, Chas  McPhadden, D  Wise, James  Nordschow, E.	toria. Massett Vancouver	Queen Charlotte islands. British Columbia.	
Norrie Stewart Adamse, W.T. Helgesen, Hans	J. G. Williams, Insp. Port Essington	Northern District of B. C.	

## LIST OF OFFICERS IN CHARGE OF GOVERNMENT FISH HATCHERIES, 1907.

Name.	P. O. Address.	Province.		•	Rank.	
Cunningham, F. H	Ottawa	Ontario		Superintendent 1	Fish Culture.	
Finlayson, Alexander				Inspector		
Walker, John	11	11		Officer in charge	Government	Hatchery
Armstrong, Wm				11	11	11
Parker, Wm	Sandwich	11		11	11	11
McNab, A. J		,		11	11	11
McCargar, J. K		11		11	11	11
Deséve, A. L	Magog	Quebec		11	11	11
Catellier. L. N				11	11	11 -
Lindsay, Robert	Gaspé basin	11		11	11	if
Elliott, Joseph		!!		11	11	11
	Mont Tremblant			17	11	11
Belknap. W. G				11 .	11	11
Mowatt, Alexander	Campbellton	New Brunswick.			21	. 11
McCluskey, Charles				17	11 -	11
Sheasgreen, Isaac				11	H	11
Savoy, Sebastien	Shippigan			11		11
LeBlanc, N.S	Cape Bald	11		11	tı	11
Ogden, A	Bedford basin	Nova Scotia		11	17	11
Harris, W. F.,	Pictou	11		11	11 1	11
	Canso			11 .	11	11
	N. E. Margaree			11	11	11
Burgess, Frank	Windsor	11		11	11	11
Holroyd, A. W	Windsor station	P. E. Island		11	11	11
Hooker, F. W	Selkirk	Manitoba		11		11
Whitwell. Thomas	Skeena river	British Columbia	a	11	11	11
Mitchell, D. S				11	11	11
Robertson, Alexander	Lillooet	11		11	11	11
Robinson, Thos	Harrison springs	11		11	11	11
Roxburg, Wm	New Westminster.	11		. 11	11	11
Bucknall, R. C	Eivers inlet	11		11	11	11
Pretty, A. W				11		11
Gibbs, H. Kemp, Ernest		11		11	11	11
V E	02 7 11			Dominion Oyster		

## LIST OF CANADIAN GOVERNMENT CRUISERS AND NUMBER OF CREWS, 1907.

O. G. V. Spain, Commander of Marine Service, Ottawa.

Name of Vessel.	Commanders.	Winter Address.	Number of Crew.
Canada Constance Curlew Falcon Kestrel Princess Osprey. Petrel Vigilant Total of Officers and Crew.	George M. May, Capt. Capt. Robinson, acting E. B. Williams H. Newcomb, Capt W. Wakehan, Comdr. J. Graham, Capt. W. H. Kent, Capt E. Dunn, Capt	Vancouver, B.C. Vancouver, B.C. Vancouver, B.C. Caspé basin Cambridge road. P.E.1. Liverpool, N.S. Walkerville, Ont	22 17 5 22 27 19 25

